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# eBusiness Guide for SMEs

*eBusiness Software and Services in the European Market*

European Commission

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**eBusiness Guide for SMEs**
**eBusiness Software and Services**
**in the European Market**

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Unit D4: ICT industries for competitiveness and innovation

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# Foreword

*Today it is clearer than ever that information and communication technology (ICT) and eBusiness models are the most important drivers of innovation and competitiveness. ICT has revolutionised the way business is done and it will continue to do so in the future. But ICT can only lead to substantial productivity gains when accompanied by organisational changes: innovative eBusiness models and investment in skills.*

*Unfortunately, the potential of ICT-enabled innovation and new business models is still underexploited by small and medium-sized enterprises (SMEs) in Europe. SMEs are a major source of entrepreneurial skills and creativity and contribute to economic and social cohesion. They hold the key to innovation and are also emerging as global players, by participating in worldwide production and supply chains. It is obvious that in the challenging race for competitiveness and excellence, where new technologies and innovation play a central role, European SMEs cannot afford to lag behind.*

*That is why SMEs have been placed high on the Lisbon reform agenda. The goal is to unlock the growth and jobs potential of SMEs by making full use of their innovative capacity. In this context, the European Commission, in collaboration with SMEs and their representatives, is drawing up a „Small Business Act" for Europe, to help SMEs succeed in our increasingly globalised world, including through the improved integration and innovative use of ICT.*

*Around the world, governments have increasingly sought to promote ICT and eBusiness models as a way of enhancing the competitiveness of their SMEs. The European Commission's Enterprise and Industry Directorate-General is also aiming to reinforce the coordination among EU Member States and improve the effectiveness of public SME policies promoting the innovative use of ICT and the exchange of good practices, through the establishment of the eBusiness Support Network for SMEs (eBSN), http://ec.europa.eu/enterprise/e-bsn/index_en.html.*

*European SMEs tell us that they need readily available, affordable and user-friendly eBusiness solutions and services specifically tailored to their situation, so improving the availability of such solutions is among the key policy priorities that eBSN has set itself. But SMEs also need to know how to keep up with developments make informed decisions when selecting and introducing eBusiness solutions. In a world of continuous technological progress, this is a growing challenge for European SMEs.*

*In response, the Enterprise and Industry Directorate-General, in the framework of the eBSN, commissioned the development of the eBSN eBusiness Solutions Guide for SMEs, an intelligent online tool to diagnose an enterprise's needs and competences and propose a range of appropriate eBusiness solutions and service providers. The eBSN eBusiness Solutions Guide for SMEs is one of the actions foreseen under the umbrella of the Small Business Act for Europe and provides effective support to SMEs and their advisers as they seek to exploit ICT in their businesses. The publicly accessible, web-based application is available in English, French and German and is currently being translated into all other EU languages (http://ec.europa.eu/enterprise/e-bsn/).*

*Our ambition is to offer the European SMEs a complete, independent and practical eBusiness guide, which fairly represents the European ICT supply market and which will prove to be of great help as they explore the myriad opportunities for innovation through ICT and eBusiness.*

*Françoise Le Bail*
*European Commission SME Envoy*
*Deputy Director-General for Enterprise and Industry*

# Executive Summary

The European "eBusiness Solutions and Services benchmarking project" has been carried out for the European Commission's DG Enterprise and the European eBusiness Network (eBSN). This report describes the key project results - the web-based "eBSN eBusiness Solutions Guide for SMEs". It is addressed to small and medium-sized enterprises (SMEs), advisors to SMEs, and providers of eBusiness and IT software and services, as well as other interested parties.

## Objectives of the project

The project facilitates the work of the European eBusiness Support Network, which focuses on policy exchanges and actions, including "improving the availability of e-business solutions for SMEs". The objectives of the project are:

- to carry out a large-scale market analysis of main trends in the supply of eBusiness solutions and services,
- to develop the interactive web-based eBSN eBusiness Solutions Guide, an online tool which includes a growing database on eBusiness solutions and services currently available,
- to realize the eBusiness Competence Index (EBCI), an index and methodology to assess the eBusiness status of an SME, and to recommend relevant solutions for individual business processes.

The following paragraphs provide a summary of the market research results, and introduce the eBSN eBusiness Solutions Guide including the EBCI.

## Current situation and trends in the European eBusiness market

The market value of information and communication technologies in Europe in 2006 accounted for one third of the entire world market. Past and future trends in the IT market put Europe consistently in second place, behind the United States, and indicate that the gap between the two most developed technological regions is increasing. The historical leadership of the United States in Information Technology development will continue and will impact significantly on market dynamics.

The analysis shows that in Europe SMEs have a lower propensity to adopt eBusiness solutions than Large Enterprises (LEs). The technological gap between SMEs and LEs is unquestionable. Nevertheless, competitive challenges are pushing SMEs towards the adoption of eBusiness as a valuable instrument to increase productivity and to reduce the costs of information and communication. Regardless of their size, most firms state that eBusiness plays "a significant or some part in the way they operate".

Combining data on strategic relevance of eBusiness, size of firm, and country, we find that eBusiness adoption has high growth margins in SMEs. The main drivers for eBusiness adoption differ in SMEs and in LEs. SMEs are concerned principally with competitive advantage and market share, while LEs are more focused on understanding supplier expectations, competitors' behaviour, and customer expectations.

All the deterrent factors are closely related to company size, which influences not only financial resources, but also the availability of skills to manage complex eBusiness systems. The specific characteristics of SMEs demand that eBusiness systems are precisely tailored to their actual operational requirements.

## The eBusiness market for the SME segment

SMEs are increasingly aiming to exploit the benefits of enterprise software and services originally used only by much larger companies. At present, the growth rate of the SME eBusiness segment is higher than in the Large Enterprise segment. In consequence, all the main IT players are focusing on this segment as a major new source of revenue. They are developing specific market strategies and technical actions. IT suppliers are putting in place horizontal market strategies, and in some cases, restructuring their internal organisation of supply.

Suppliers have recognised that meeting SMEs' demands requires not simply a re-scaling and reduction in functionality of applications and packages, but also a consistent support infrastructure, ensuring the necessary proximity for management of the project.

## The web-based eBSN eBusiness Solutions Guide for SMEs

The eBSN eBusiness Solutions Guide is available at **http://ec.europa.eu/enterprise/e-bsn/index_en.html**. It helps SMEs and their advisors to find suitable eBusiness solutions and services tailored to the specific characteristics and needs of the company. The tool provides support for individual company characteristics and eBusiness development objectives. SMEs and their technology consultants may use different instruments such as search-and-assessment functionality to access detailed information on eBusiness products and services. Several classification systems support the search process. The user community and independent experts are able to provide feedback and experience with individual products.

The eBusiness Competence Index (EBCI) helps users to assess the available technological infrastructure and systems. Only by answering several questions concerning the current eBusiness infrastructure the EBCI supports SMEs to get proposals of appropriate eBusiness products and services for improving their current situation. This way SMEs do not need to have a concrete idea about an eBusiness solution since they get the proposal by providing contextual information. The EBCI calculation is part of the eBSN eBusiness Solutions Guide and can be found in the menu at "Company Maturity".

Suppliers of eBusiness solutions and services have the possibility to use the online tool as a marketing instrument for their products and services. The instrument uses a common set of product details which simplifies the comparison between different products. The eBSN eBusiness Solutions Guide is in this respect an excellent opportunity for technology providers to provide detailed information on their eBusiness products and services on a well-known platform.

The tool has been populated directly by a large number of European eBusiness product- and service-providers. Fraunhofer IAO and FORMIT used two approaches to contact the solution providers:

A top-down approach: contacting the most important national IT associations across the European Union to promote the initiative among their members.

A bottom-up approach: contacting directly more than 11,000 European ICT suppliers and asking them to insert their eBusiness offers, especially for SMEs, in the eBSN eBusiness Solutions Guide.

The data for this report were collected between July and October 2007 in the preliminary version of the eBSN eBusiness Solutions Guide. During the period studied, 1,122 users registered on the platform. Data on 774 eBusiness producers and 1,128 products, including open-source solutions, were entered. The up-to-date information is made available as part of the web-based eBSN eBusiness Solutions Guide for SMEs. At this stage suppliers are being invited to enter their data in country-specific languages and have the opportunity to enter more detailed product information additional to the core criteria which have been already gathered. The user interface of the web-based guide is available in English, French and German, and will be translated into more languages.

## Conclusion

The following chapters introduce the eBSN eBusiness Solutions Guide and describe its main functions and benefits. This explanation is accompanied by information about the eBusiness market situation for SMEs.

The eBSN eBusiness Solutions Guide is an excellent platform for SMEs and their advisors to search for products and services matching their specific needs. It is also a self-assessment tool that offers suggestions about which categories solutions may be found in. And for suppliers of products and services, it provides a wide-ranging information platform.

# eBusiness Guide for SMEs

# 1. Introduction

## 1.1 Objectives and scope of the project

The purpose of the European eBusiness Solutions and Services benchmarking project is to analyse and review the market scenario of commercially available products and services for SMEs from the perspective of supply and demand. The project responds to the challenges raised by the EU "eBusiness Support Network (eBSN)", which has brought forward the request to improve the availability of eBusiness solutions for SMEs and for microenterprises. This request emerges from the fact that SMEs have different needs with respect to ICT and e-business applications as compared to large enterprises.

The main focus of the project is to construct a dynamic online tool (the eBSN eBusiness Solutions Guide) capable, on the one hand, of describing the available eBusiness software products, systems and services from the functional, operational, technological and pricing points of view. On the other hand, the eBSN eBusiness Solutions Guide is capable of characterising the demand side: the structure, organisation and operations of the small and medium-sized enterprises are classified and described by means of a number of indicators. The descriptors of the eBusiness supply and demand side are combined through an articulate matching process, which allows representatives of small and medium-sized enterprises, their technical managers or their technical advisors to input a set of parameters. On the basis of these parameters, the eBSN eBusiness Solutions Guide will provide guidance towards the most suitable and cost-effective eBusiness solutions available.

Furthermore, the eBSN eBusiness Solutions Guide will provide the users with information on their eBusiness competence. This entails an assessment of the available technological infrastructure and systems of the company, on the provision of possible development guidelines and on the choice of specific product or service types and classes.

In addition to the eBSN eBusiness Solutions Guide, the project also provides a general qualitative and quantitative picture of the supply and demand of eBusiness products and services worldwide, identifying the main supplier market, describing the main technological, functional and market strategies of technology providers and taking into account the fact that the major purchasers of eBusiness solutions were originally the Large Enterprises – LEs.

This qualitative and quantitative market analysis, which takes into consideration the main global numerical trends in the technologically advanced areas, aims at showing how the eBusiness demand is changing and how the suppliers are adjusting their marketing and sales strategies to the new requirements of customers or to the requirements of new customers, as the SMEs are doing.

The innovative approach taken to develop the project and to populate the eBSN eBusiness Solutions Guide involves motivating the suppliers themselves to provide the data from their applications, according to a standardised and tested descriptive format. The involvement of suppliers has been based on an EU-wide communication effort which, in the first instance, has included ICT associations from the entire EU. The second step of supplier involvement has been based on direct contact with supplying enterprises. The project team has contacted several thousands of them to ask them to provide the data on their products. The eBSN eBusiness Solutions Guide has made it possible to collect information of different types and from different sources, to make them homogeneous and comparable, offering a valuable and effective instrument to introduce SMEs to eBusiness.

The project team was able to create a unique instrument available for 3 scopes and classes of users:

- At the first stage, the project team contacted European IT national associations and eBusiness suppliers.
- At the second stage, the eBSN eBusiness Solutions Guide has become the instrument for the eBusiness suppliers to promote their IT supply for the enterprises (and especially for the smallest ones).
- At third and final stage, the eBSN eBusiness Solutions Guide has provided a valuable instrument for the European SMEs to approach the ICT market, comparing their technological maturity and the available eBusiness solutions for their needs.

One of the most important characteristics of this tool is its non-centralised management: this feature offers a guarantee of independent operation throughout the project (and, indeed, after the end of project). The eBSN eBusiness Solutions Guide will work as a free pre-market where the eBusiness suppliers will be interested in promoting their solutions and SMEs will gain an extremely valuable source of information on the most updated eBusiness solutions.

## 1.2 The present report

The present report aims at providing a summary of the findings of the eBusiness Tools and Services benchmarking project. All these findings are put into the perspective of the user of the eBSN eBusiness Solutions Guide and this document has the key aim of facilitating its use and also of providing user focused information to grant users extensive and careful market information on the eBusiness Tools and Services market.

This main goal of this report is to show both the research findings on the European eBusiness market and the level of development of the eBSN eBusiness Solutions Guide, its valuable support for eBusiness adoption and the usability for the SMEs.

The section on the situation of European eBusiness for SMEs presents an overall picture of the market scene related to eBusiness solutions. From the quantitative point of view, it shows how important the SME segment is for eBusiness tools and services providers and to what extent their products are focused on the specific needs of SMEs. It demonstrates how the supply of eBusiness solutions has been evolving in the last few years and how the behaviour of suppliers has changed to take advantage of the opportunities in this segment.

The reader should keep in mind that supply and demand are two sides of the same coin and that they evolve in parallel. The interaction mechanism between supply and demand is not unidirectional, but mostly works in both directions, while frequent adjustments allow the alignment of supply and demand, determining modifications and evolutions on both sides.

Furthermore, competitive pressure forces SMEs to give greater consideration to the adoption of eBusiness tools to increase efficiency and effectiveness in their operations.

The guide for selecting eBusiness products and services aims to provide the users of the eBSN eBusiness Solutions Guide with general and wide-ranging information on the criteria which are normally used to select and purchase software and systems. This section can be considered as being introductory to the description of the eBSN eBusiness Solutions Guide to match eBusiness solutions with SME characteristics.

This report provides a functional overview of the tool, the description of user roles, the matching process and the additional functionalities, such as supply-side marketing, the demand-side search and the community functionality.

A number of user scenarios, or use cases, demonstrate the concrete use of the tool to find real solutions for eBusiness innovation in SMEs.
The report also provides a preliminary statistical analysis of the data input into the online system, delivering a segmentation of the tools according to different criteria.

## 1.3 Motivation and benefits of the eBSN eBusiness Solutions Guide

The project has demonstrated that the eBSN eBusiness Solutions Guides in the most effective way to present the features and characteristics of potentially several thousands of available eBusiness tools and solutions and their different descriptive dimensions. For the suppliers of software and services, it is a good place to promote themselves and their products. It is furthermore the only way to gather information on user SMEs to identify the most suitable solutions.

The huge growth potential of the stock of tools and applications can only be exploited in full when navigable by means of electronic queries and matches, while no paper based description can ever provide the flexibility, the dynamics and usability of the electronic version.

# eBusiness Guide for SMEs

# 2. Market situation and potential evolution of eBusiness for European SMEs

## 2.1 Scope and objectives

The quantitative analysis of the IT and eBusiness markets and the relevant qualitative evaluation shall aid the understanding of the context in which European small and medium enterprises operate and the relationship with eBusiness use and development. This section also highlights the key market characteristics as well as any form of distortion potentially hampering the access of SMEs to eBusiness solutions.

This section includes a comprehensive analysis of the adoption rate for ICT solutions in specific SME business processes in order to identify the technological challenges faced by enterprises of different sizes and in particular in the smallest size groups, looking at the enabling and hampering factors which determine eBusiness adoption.

eBusiness adoption by European SMEs is no longer hampered by the possibly inadequate supply of technological solutions: the most important ICT players have already structured market approaches for the SME target or for the Small and Medium Business segment.(1) Another objective of this work is to understand the ways in which the eBusiness suppliers fulfil the SME needs and how they physically reach the SME market. The marketing approaches adopted by eBusiness players to reach SMEs constitute an interesting aspect of the supply side, which also has an influence on the content of their offer.

Interviews with the main players and their key statements, analysis of market perspectives reports, review of web articles and press-cuttings all confirm the growing interest in this market segment.

## 2.2 The IT market

### 2.2.1 The key factors for European eBusiness supply

The European competitive positioning in Information and Communication Technologies allows us to define, albeit somewhat roughly, the technological environment and its potential spill-overs for the productive world.

The market value of the information and communication technologies in Europe in 2006 accounts for one third of the world market. The European ICT market has reached 680 billion euros, outperforming the US by 18.4% (574.4 billion euros) and the Rest of the World by 38.1% (492.3 billion euros), but splitting the ICT market in Telecommunication and Information Technologies. While Europe was the world leader in the TLC market in 2006, the US is stronger as far as the IT market is concerned (368 billion euros as opposed to the European share of 324 billion euros).

The past and future trends of the IT market show that Europe maintains a constant second-rank position in respect to the United States. In the last five years (from 2001 to 2005), the mean annual growth rate in the most technologically-developed areas has been 3.5%. Furthermore, according to the EITO 2007 forecasts, in the near future the IT markets are expected to grow. From 2005 to 2008, the US technological market will grow by 18.7% and the European market by 13.2%.

These findings confirm that the historical leadership of the United States in Information Technology development will continue and lead to significant impacts on market dynamics. Most of the current main IT players were founded in the United States and have boosted technological demand in the entire world. The large IT players in the market will still mainly be of US origin. All major multinationals in IT have US roots. This hampers to a certain

1. We need to point that, while the study has the goal to investigate the ICT supply towards the Small and Medium Enterprises (SMEs), the IT industry refers to them as Small and Medium Business (SMB). The difference among the two points of view essentially regards the target of the enterprises addressed: the commonly adopted European Commission definition of SMEs encompasses enterprises with less than 250 employees, while most of the IT players consider all enterprises with less than 1000 employees as belonging to the SMB segment.

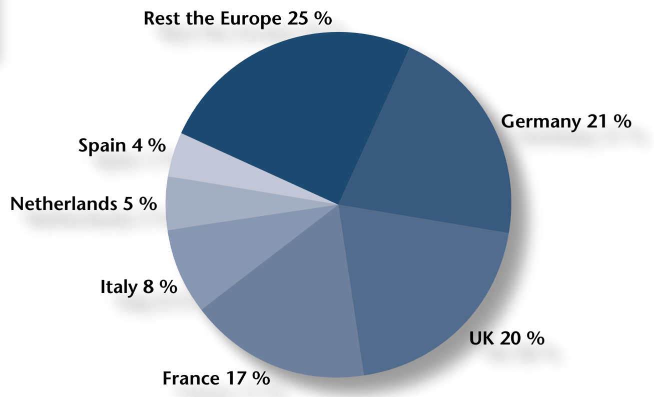
extent the development of market shares of European companies, which nevertheless have the chance to conquer the niche markets which can better support the bulk of SMEs, providing better customised and "closer" eBusiness products and implementation service. This also implies that most probably the Large Enterprise (LE) market segment will be dominated in the near future by US IT multinationals. Nevertheless the peculiar features of the European SME market, the structure of demand and its atomistic character make it an extremely interesting opportunity for dedicated European IT providers, who can exploit its potential.

*The productivity gap between Europe and USA is rooted in the different IT adoption. Especially for firms, the challenge over the next few years will be to try to keep up with the kind of technological innovation capable of offering market advantages in the global competition. On the other hand, the smallest European IT providers and suppliers will have the chance to gain market share in Europe providing eBusiness solutions more suitable for the European enterprise characteristics.*

### 2.2.2 Does the national technological context affect the SMEs' eBusiness adoption?

The analysis of ICT market shows that certain geographical areas have technological advantages in respect to other areas. This means that there are markets or groups of markets which are far more developed than others.

The development of the national technology market is a strong indicator for the propensity to invest in eBusiness technology: actually data on the Information Technology market show that the first three countries in the ranking (Germany, UK and France) together represent more than 60% of the whole European value and that the first six countries (Germany, UK, France, Italy, Spain and the Netherlands) represent 75%. This proves that heterogeneity is very high amongst European countries. (Figure 2-1).



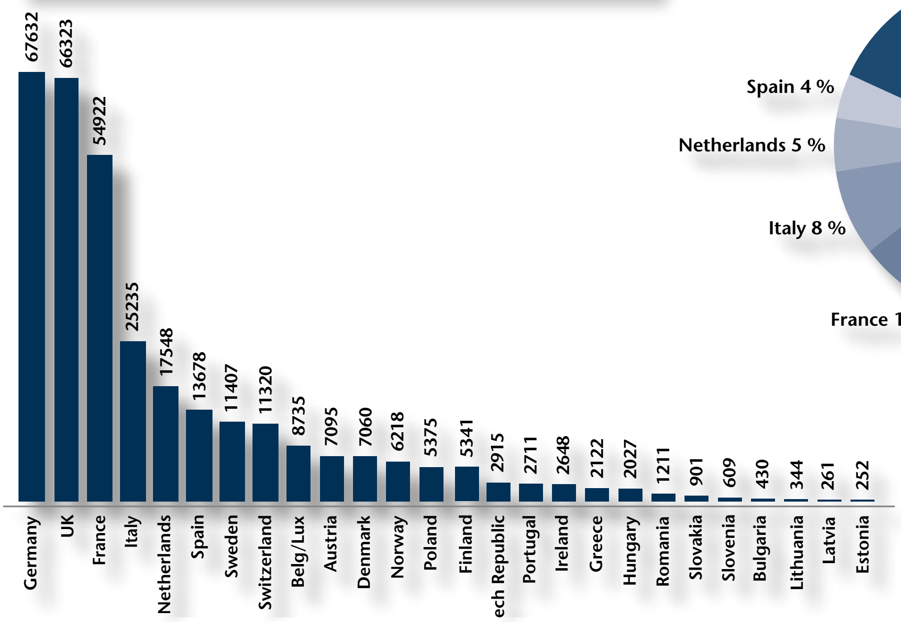




Figure 2-1- IT national markets values in 2006 (in million euros) (Source: EITO 2007)

In 2006, national values ranged from the low end of 252 million euros in Estonia to the top end of 67,632 million euros in Germany. The German ICT market is over 268 times greater than the Estonian one.

The concentration of the IT market in the first 6 countries gives us a strong indication as regards the European countries in which eBusiness could play a strategic role, but this might not be enough to draw a clear picture of the intensity of IT, also accounting for the structural and economic differences amongst the countries.

As a matter of fact, in terms of IT spending per capita in 2005, European leaders did not perform very well (Figure 2-2). The UK ranked fifth (1,027 euros), followed by France (888 euros) in eighth place and Germany (797) in eleventh. Italy (430 euros) and Spain (326 euros) are the only two amongst the EU leaders which show a below average performance, followed by Portugal, Greece and all the countries in Eastern Europe. The European country with the highest per capita spending in IT is Switzerland with 1,508 euros (+46.8% compared to the UK). The lowest value of IT spending per capita is 46 euros in Romania.

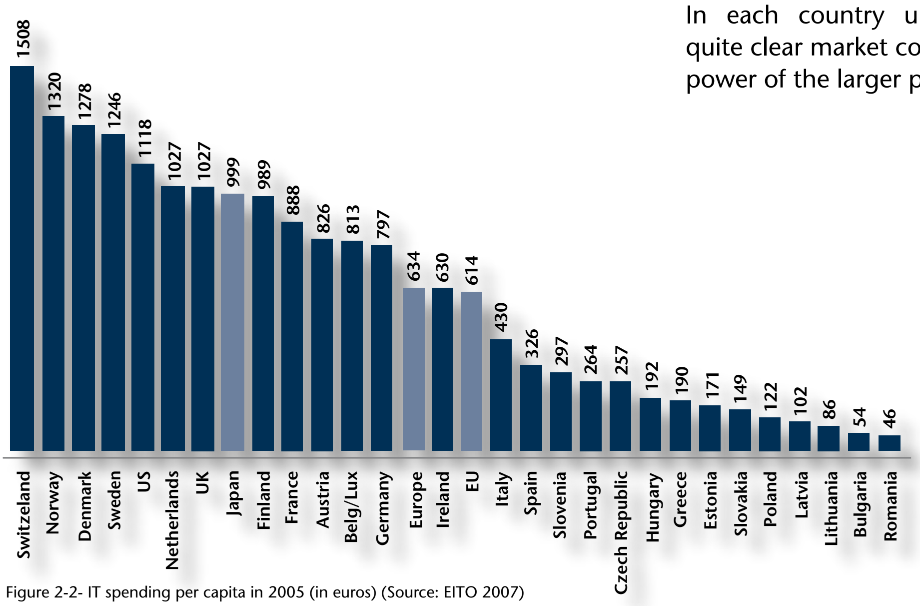



Figure 2-2- IT spending per capita in 2005 (in euros) (Source: EITO 2007)

These findings signify that the national IT scenario and industry have a significant impact on the propensity of enterprises to adopt innovative technological solutions for their business. In other words, the general technological development is one of the fundamental external drivers for eBusiness system adoption.

*The national IT context heterogeneity represents the starting point for understanding the eBusiness demand and its potential evolution. In the most technologically developed European countries, the IT adoption has become a need for facing the increasingly powerful competition. In the other countries, eBusiness represents one of the most interesting and concrete opportunities for the firms' growth and development.*

### 2.2.3 Does the IT market concentration affect the SMEs eBusiness adoption?

The geographical concentration at European level, shown by the previous numerical values, is not the only one in the Information Technologies field. In each country under consideration, there is quite clear market concentration due to the market power of the larger players and multinationals.

Information on national IT industry concentration could help us to characterise the supply of the eBusiness solutions, especially for the SMEs. The large number of SME clients on the demand side can lead to a two-fold scenario: a low IT market concentration of the supply side can mean a strong customisation of the proposed solutions, while a high concentration could imply a higher degree of standardisation.[2]

The IT industry concentration and trends, measured as the share of the "top 10 vendors" in the leading countries show that there are quite different situations across the EU. In 2005, the most concentrated IT market was in Germany with more than 67%, followed by Italy (56.6%) and Spain (51.7%). In the UK and France, the top 10 IT vendors in 2005 cover about one third of the market share. The concentration has been increasing over time, especially in the most "IT developed countries".

In spite of the sizeable differences amongst countries, the measurement of the degree of concentration shows that all markets are dominated by large suppliers. This means that large companies normally have the larger IT market share nationally. However, this does not mean that there is no role for small and medium players, who are in a much better position than large providers to satisfy the customisation-, resizing- and proximity requirements of most SME segments. In other words, small and medium eBusiness providers will be those who will increase their market share in the SME segment, even if its overall monetary value will be proportionally lower because of the smaller size of the single eBusiness innovation project.

In eBusiness supply, and especially the supply for the atomistic European SME market, the predominance of the largest IT players leads one to focus more closely on the geographical proximity problem and to the efficiency of the feedback mechanism from the SME needs.

The eBusiness adoption by the large number of European SMEs who normally require more and more customised solutions can be heavily affected by the degree of market concentration and thus by the marketing and sales strategy: the bigger the supplier, the less flexible his supply. As the following paragraphs show in detail, the eBusiness adoption rate strictly depends on the balance between the competitiveness of the smallest local players and the marketing channels of the largest ones.

*The high market concentration in some European countries could have a double impact on the eBusiness adoption in European enterprises. The first positive effect concerns the firms that do not require customised IT solutions. In this way, the market concentration also furthers the technology standardisation within the firms. The reverse effect impacts on the firms requiring customized solutions that, in most of the cases, are small and medium enterprises.*

2. Further indications on the IT largest players and multinational companies are provided in the following paragraphs.

# 2.

## 2.3 The European eBusiness market: looking at the enterprises' perspective

Analysing the eBusiness market means dealing with the ICT market for enterprises. To understand if there are some intrinsic characteristics of SMEs which have an impact on eBusiness adoption, the eBusiness W@tch 2006 (EBW 2006) (3) represents an irreplaceable source of information – especially on the different exploitation possibilities of IT facilities according to firm size.

The goal of these measures is to provide state-of-the-art eBusiness adoption according to firm size and business process. Does eBusiness represent an opportunity for the European SMEs?

The EBW 2006 report also provides useful synthetic measures of the eBusiness maturity of the European enterprises, based on the firms' ICT adoption rate: the eBusiness index and four sub-indexes

- ICT networks sub-index evaluating the access to ICT networks in the firm;
- e-Integration of the internal processes sub-index evaluating the level of integration in the firm;
- e-Procurement and the supply chain integration sub-index showing the level of integration of the supply-side activities;
- e-Marketing and sales sub-index showing to what extent marketing and sales processes rely on technological instruments.

While the first 2 sub-indexes strictly deal with the firm's ICT adoption level for internal activities, the last 2 are more closely related to e-commerce maturity.

Looking at the eBusiness index and at the 4 sub-indexes, it is without doubt that SMEs in Europe have a lower propensity to adopt eBusiness solutions than LEs. Comparing the normalised values (to 100) for the largest enterprises with the results for the other firms' groups, it is possible to draw some interesting considerations on SMEs and their technological gap in respect to the LEs: the most developed field in the smallest firms is ICT networks, while the least developed one is the integration of internal processes (Figure 2-3).

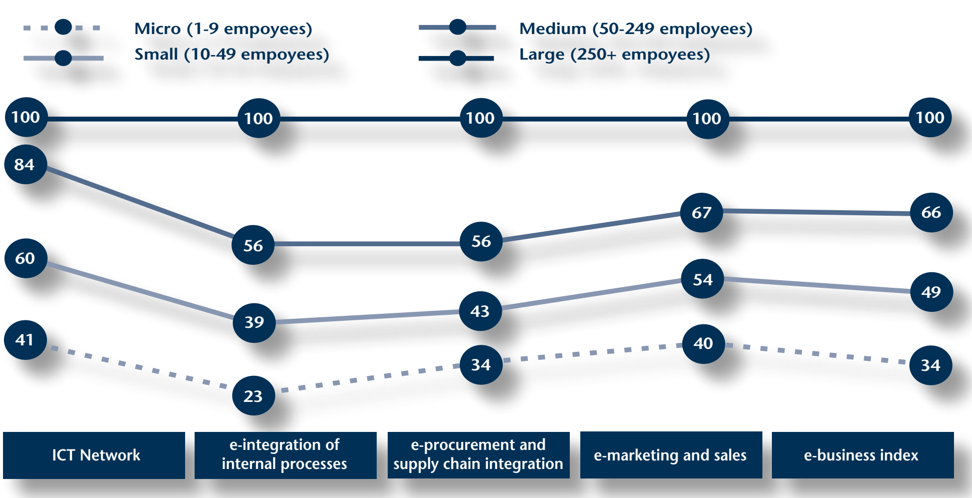



Figure 2-3 - eBusiness Index and sub-indexes (Source: eBusiness W@tch 2006)

3. The eBusiness W@tch 2006 summarises quantitative data from a survey of 14,000 decision makers of European enterprises, and qualitative information on the use of eBusiness from 75 cases studies.

The gap between SMEs and LEs tells us that potential opportunities for ICT development in the small business area are numerous, but one must also consider that the natural (and efficient) ICT adoption rate for SMEs is probably lower than that for LEs.

In "The European eBusiness Report: a portrait of eBusiness in 10 sectors of the EU economy" 2006/07 edition, the issue of the SMEs' ICT potential growth is well explained. "The ICT implications for SMEs are ambivalent. On the one hand, ICT may offer increased economies of scale. Large enterprises can afford powerful ICT systems at proportionally lower cost than SMEs have to meet for their comparatively simple infrastructure. The eBusiness Index 2006 confirms that the diffusion of ICT systems for internal and external process integration increases in a linear fashion according to firm size. On the other hand, it is debatable whether small companies really need the same powerful solutions as large firms in order to achieve the same benefits. In a small company, information management and eBusiness can possibly also be effectively and efficiently achieved by the use of less sophisticated and less expensive systems."

*The tough competitive challenge facing the European SMEs every day makes eBusiness a valuable instrument for both increasing a firm's labour productivity and reducing information and communication costs. IT solutions represent an opportunity for SMEs to become more profitable and competitive. However, in order to reap the full benefits, the introduction of eBusiness solutions has to be accompanied by innovation in business processes, organisational change and capacity building.*

### 2.3.1 Which European enterprises have already used the opportunity?

The differences in the ICT adoption rate amongst the different firm size groups in the EBW 2006 survey data gives us the opportunity to assess the intensity of the eBusiness maturity (in terms of ICT adoption rate) between the small and large enterprises.

Regardless of firm size, the survey results give a strong indication of the eBusiness success: 70% of firms interviewed by eBusiness w@tch 2006 said that eBusiness played "a significant part in the way they operate" or "some part in the way they operate".

While the firm's size is marginally relevant amongst the enterprises which have declared that eBusiness has „some part in the way they operate"[(4)], the difference between SMEs and LEs is manifest when eBusiness has a strategic role in the enterprise (Figure 2-4).

The percentage of LEs that consider eBusiness to be a significant part is double that of the SME average. Therefore, in about half of the LEs, eBusiness has a role to play, but it has a strategic relevance only for one third of them. The evidence is that eBusiness presently covers a strategic role essentially in the largest enterprises (more than 250 employees).

4. The percentages, independent of the enterprise size, are all very close to the sample mean: 47%.

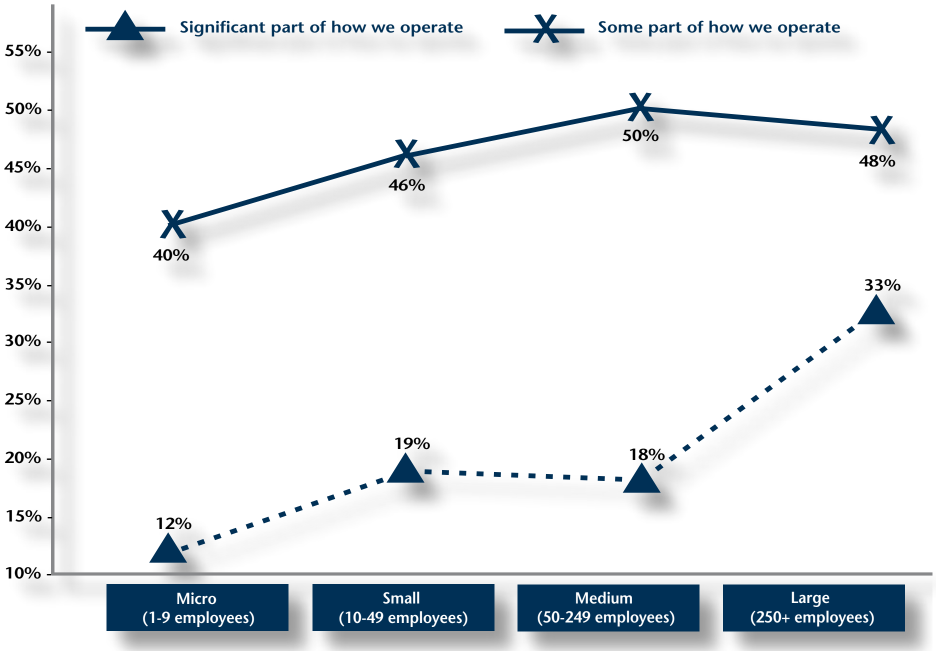



Figure 2-4 - Relevance of eBusiness in the firms (in percentage of the sample) (Source: eBusiness W@tch 2006)

When also taking the geographical dimension of the interviewed enterprises into account (German, English, French, Italian and Spanish ones), we find a more complex and heterogeneous picture on eBusiness maturity.

Considering the enterprises with at least 250 employees, the eBusiness plays a strategic role, especially in the German LEs, and mainly a marginal role in firms in the other countries. In Germany, the percentage of enterprises which consider eBusiness to be a significant part of the way they operate is higher than the percentage of those considering eBusiness to be of little importance (61% vs. 33%). (Figure 2-5)

In the small enterprises of the countries under consideration, the eBusiness essentially plays a marginal role. The percentage of enterprises declaring the eBusiness to represent only some part of their activities ranges from 37% in France to 54% in the UK. Small enterprises stating that eBusiness covers a strategic role mainly come from Germany (29%). (Figure 2-6)

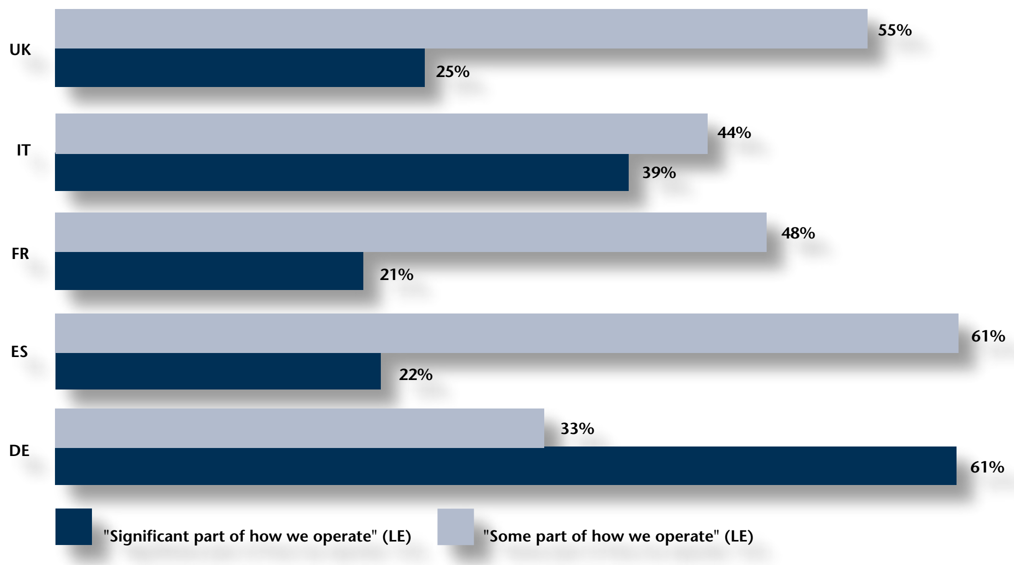



Figure 2-5 - Percentage of large enterprises in which eBusiness has a part (Source: eBusiness W@tch 2006)

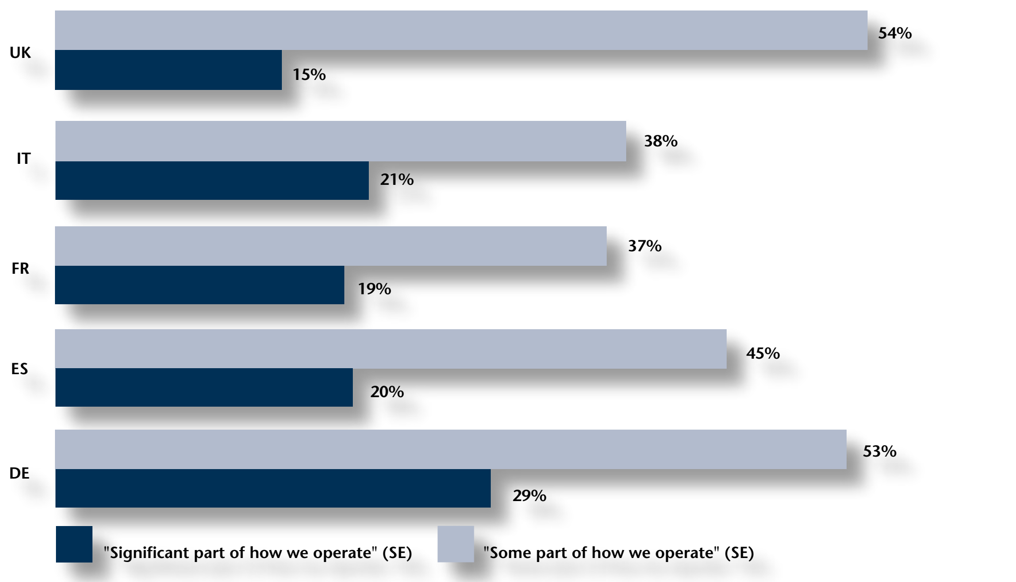



Figure 2-6 - Percentage of small enterprises in which eBusiness has a part (Source: eBusiness W@tch 2006)

2.

*Data on the relevance of eBusiness in the most technologically developed European countries enforce the hypothesis of the "natural" evolution of eBusiness. It's reasonable to assume that, in each national eBusiness market, ICT is adopted first by large firms and then it also becomes important for the small enterprises. The next step is a smooth adoption rate (starting from regarding some business areas with some part in business activities to gaining a strategic role in the whole business).*

The final picture of this analysis is of great relevance to SMEs: eBusiness adoption has high growth margins in Europe. Due to the intrinsic characteristics of SMEs, it's hard to imagine for the smallest enterprises future adoption rates close to those of LEs but, at present, growth opportunities are manifold.

## 2.3.2 Which are the favourite eBusiness solutions of the European SMEs?

Research findings from the EITO 2007 survey, as well as research and data from the last EBW report, provide the necessary information to draw a clear picture of the European eBusiness sector, segmented by the eBusiness solution. The final goal is to understand which SME processes are supported by eBusiness solutions and which are the differences with the larger enterprises.

Following the EBW approach, we analyse the eBusiness solutions considering as the main categories ICT networks, integration of internal processes, e-Procurement and supply chain integration, e-Marketing and sales.

### ICT networks

In the sample of the EBW 2006 report, data on Internet access and remote access to company network show that almost all the European enterprises with more than 10 employees using computers have Internet access (Table 2-1). The percentage amongst the micro enterprises is 89%.

In firms with Internet access, the average share of employees with a connection is 43%: this percentage is lower than the mean for both micro (51%) and large enterprises (44%). This apparent contradiction for the smallest enterprises is due to the low rate of enterprises using both computers and Internet connections.

| | | Companies with Internet access | Companies with broadband Internet access | Average share of employees with Internet access | Remote access to company network |
|---|---|---|---|---|---|
| | | **93%** | **69%** | **43%** | **16%** |
| Micro | (1-9 employees) | 89% | 62% | 51% | 12% |
| Small | (10- 49 employees) | 98% | 75% | 29% | 22% |
| Medium | (50-249 employees) | 99% | 83% | 33% | 43% |
| Large | (250+ employees) | 99% | 84% | 44% | 60% |
| Base | (100%) | Firms using computers | Firms using computers | Firms with Internet access | Firms using computers |

Table 2-1 - Relevance of Internet access and remote access to company network acc. to firm size (Source: eBusiness W@tch 2006)

The perfect correlation between firm size and ICT security, in terms of secure server technology, digital signature or public key infrastructure and a firewall provides us with a picture of the quality and the consequent business relevance of the Internet connectivity for each group of firms (Table 2-2). While security is an important feature for LEs (94% have a firewall, 64% use secure server technology and 39% adopt digital signature or public key infrastructure), micro enterprises give less consideration to Internet threats (the percentages are 62%, 20% and 15%).

## Internal process integration

The EBW 2006 report takes into account four eBusiness solutions for the internal process integration: intranet, accounting software, ERP systems and document management systems. At the European level, the least adopted solution amongst the firms using computers is ERP systems (11%), especially in the micro ones (7%). Amongst the firms not using an ERP system, the percentage of those using accounting software amounts to 57%: half of the micro enterprises and almost 9/10 of the LEs (Table 2-3).

Excluding accounting software for the moment, the most common internal process integration solution in LEs is the Intranet (76%).

| | | Secure server technology | Digital signature or public key infrastructure | Firewall |
|---|---|---|---|---|
| | | **20%** | **15%** | **62%** |
| Micro | (1-9 employees) | 16% | 13% | 56% |
| Small | (10- 49 employees) | 23% | 17% | 73% |
| Medium | (50-249 employees) | 36% | 25% | 84% |
| Large | (250+ employees) | 64% | 39% | 94% |
| Base | (100%) | Firms using computers | Firms using computers | Firms using computers |

Table 2-2 - ICT Security measures used acc. to firm size (Source: eBusiness W@tch 2006)

| | | Intranet | Accounting software | ERP system | Document management system |
|---|---|---|---|---|---|
| | | **23%** | **57%** | **11%** | **13%** |
| Micro | (1-9 employees) | 19% | 50% | 7% | 11% |
| Small | (10- 49 employees) | 28% | 70% | 16% | 13% |
| Medium | (50-249 employees) | 43% | 85% | 25% | 19% |
| Large | (250+ employees) | 76% | 84% | 45% | 42% |
| Base | (100%) | Firms using computers | Firms not using a ERP system | Firms using computers | Firms using computers |

Table 2-3 - Relevance of Internal process integration solutions acc. to firm size (Source: eBusiness W@tch 2006)

# 2.

## The two sides of e-Commerce: e-Procurement and e-Selling

One of the first pieces of evidence for e-commerce activities amongst enterprises belonging to the industrial sectors selected in the EBW 2006 report is that, regardless of size, buying online is more developed than selling online. At the European level, the Internet channel is used by 54% of SEs for placing orders and by 26% for receiving orders; amongst the LEs, the percentages are 68% and 26%.

Looking at more detailed data on placing orders online (Table 2-4), the largest part of enterprises shows online purchasing to represent a limited channel: only 1/4 of firms placing orders online uses this channel for more than 25% of the total orders and the situation doesn't change across the different firm groups.

Detailed data on e-selling activity shows that also those receiving more than 25% of orders online amount to about 1/4 across all the firms' groups (Table 2-5).

The expected differences amongst the firms' groups emerge upon the analysis of the percentages of enterprises using eBusiness applications to support marketing and sales (Table 2-6). In particular the percentages of SMEs using CRM systems and specific ICT solutions for marketing and sales are half of those for LEs.

| | | Place orders online | Place up to 25% of orders online | Place more than 25% of orders online | Use specific ICT solutions for e- sourcing |
|---|---|---|---|---|---|
| | | **48%** | **75%** | **25%** | **9%** |
| Micro | (1-9 employees) | 44% | 73% | 27% | 7% |
| Small | (10- 49 employees) | 54% | 80% | 20% | 10% |
| Medium | (50-249 employees) | 60% | 76% | 24% | 16% |
| Large | (250+ employees) | 68% | 75% | 25% | 29% |
| Base | (100%) | Firms using computers | Firms placing orders online | Firms placing orders online | Firms using computers |

Table 2-4 - Relevance of placing online orders by firm size (Source: eBusiness W@tch 2006)

| | | Accept orders from customers online | Receive up to 25% of orders online | Receive more than 25% of orders online | Use specific ICT solutions for e- sourcing |
|---|---|---|---|---|---|
| | | **25%** | **75%** | **25%** | **9%** |
| Micro | (1-9 employees) | 23% | 79% | 21% | 6% |
| Small | (10- 49 employees) | 26% | 76% | 24% | 12% |
| Medium | (50-249 employees) | 29% | 75% | 25% | 16% |
| Large | (250+ employees) | 26% | 74% | 26% | 27% |
| Base | (100%) | Firms using computers | Firms accepting orders online | Firms accepting orders online | Firms using computers |

Table 2-5 - Relevance of receiving online orders by firm size (Source: eBusiness W@tch 2006)

Core applications to support marketing and sales

| | CRM systems | Specific ITC solutions for marketing & sales | Integration of customers |
|---|---|---|---|
| Micro (1-9 employees) | 21% | 19% | 7% |
| Small (10- 49 employees) | 36% | 28% | 11% |
| Medium (50-249 employees) | 55% | 35% | 16% |
| Large (250+ employees) | 74% | 62% | 6% |

Table 2-6 - Relevance of core applications to support marketing and sales acc. to firm size (Source: eBusiness W@tch 2006)

*The analysis by eBusiness solutions shows essentially that in most of applications for ICT networks, e-Integration of internal processes, e-Procurement and supply chain integration and in e-Marketing and sales, the predominance of LEs is unquestioned in terms of the adoption rates. It's also clear that the gap between the smallest enterprises and largest enterprises increases with the complexity and innovativeness of eBusiness technology. The largest gap in the adoption rates is in the areas of remote access to company, secure server technology, firewall, intranet accounting software, ERP systems, CRM systems and specific ICT solutions for marketing and sales. The findings confirm the hypothesis on the technology adoption process. The LEs are the first users to adopt eBusiness solutions and the technology will only start to be used by the smallest enterprises when the adoption rate amongst the LEs reaches a certain threshold. In the coming years, SMEs' competitiveness will have to rely on the more complex and innovative solutions.*

### 2.3.3 For which business processes do the European SMEs adopt eBusiness solutions?

Over the course of the last ten years, eBusiness maturity progress started out by using the application of ICT technologies to increase the enterprises external connectivity. Then, during the next few years, eBusiness was increasingly applied internally. This will become a promising field for the eBusiness providers in the SME market. Considering the small size of the companies in the SME target, ICT suppliers have to move from standardised e-commerce functions to tailor-made ICT solutions in all the business processes, also taking into account the specific characteristics of different industrial sectors.

Data on the overall sample of enterprises show clearly that the main business areas affected by eBusiness include planning, decision making and financial controlling activities: the functional areas in which the highest impact is expected are accounting and management, while the least affected areas are R&D and Production, with a less strategic role of eBusiness introduction (Figure 2-7).

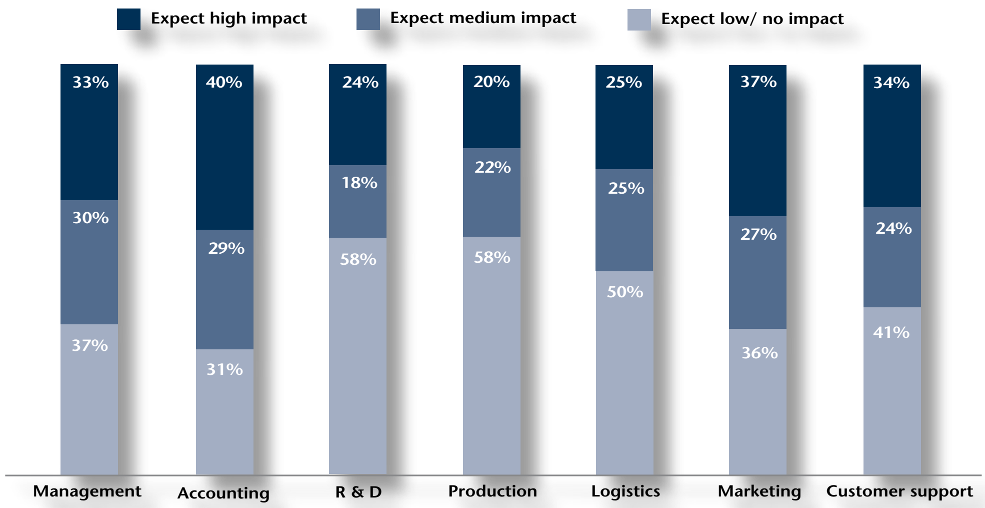



Figure 2-7 – Expected impact of ICT acc. to functional areas (Source: EITO 2007)

As shown by the most detailed EBW 2006 data, there are some marked differences between small firms and large enterprises in how they see the potential impact of ICT: LEs expect high impact in all the functional areas. For instance, while 47% of LEs expect a high impact on Management and 54% on Accounting, only 26% and 36% respectively of small firms have the same expectations. In particular, only 17% of small enterprises estimate a high ICT impact on the production processes.

*According to the specific technological requirement of the different industrial sectors and the structural firm characteristics, it seems that, especially for the SMEs, eBusiness for the internal management and related business processes will be the right future solution.*

### 2.3.4 Which are the enabling and hampering factors affecting the eBusiness development in the SMEs?

The eBusiness W@tch 2006 survey allows us to make a more in-depth investigation of the enabling and hampering factors to the eBusiness adoption by European SMEs, highlighting the extent to which the SMEs intrinsic characteristics matter.

Compared to LEs, SMEs assign partially a different importance to the eBusiness enabling factors (Figure 2-8):

- supplier expectations and competitors' behaviour have a smaller role in all the firms' groups;
- opportunity to gain competitive advantage has a primary role in the micro enterprises perspective (65% of the respondents);
- customer's expectations have a great importance for LEs (74% of the respondents).

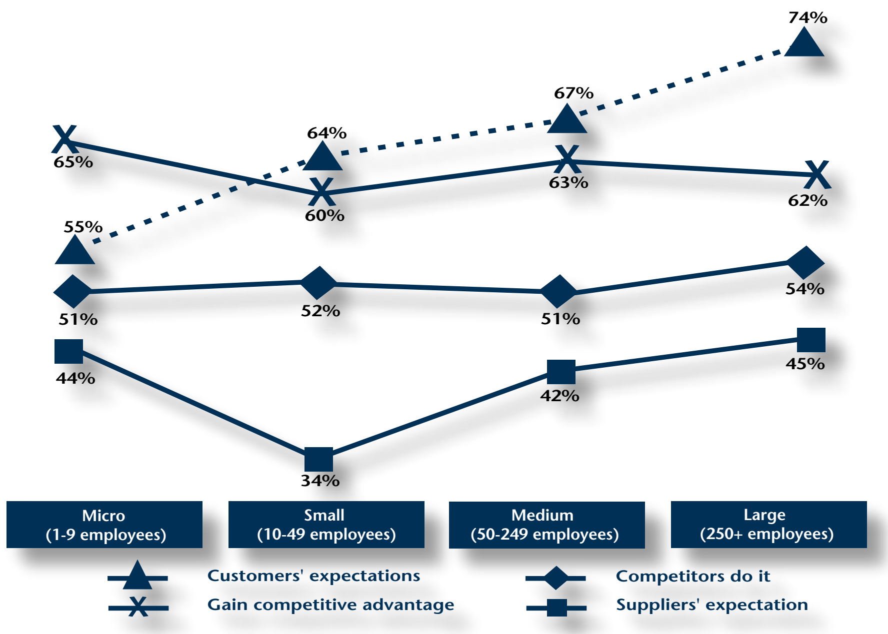



Figure 2-8 - Drivers of eBusiness adoptions as declared by companies (Source: eBusiness W@tch 2006)

Taken as a whole, the most relevant enabling factors for eBusiness adoption in the SMEs, as is approximately the case for the LEs, are those more directly related to increasing the market share.

Looking at the hampering factors to eBusiness adoption, the size of the firm is much more important. Placing the hampering factors considered by the EBW 2006 [(5)] into 3 groups, we aim at highlighting the differences amongst firms' sizes.

In the first group of obstacles, the micro enterprises show behaviour very similar to that of LEs (Figure 2-9). It means that cost of technology, security problems and legal issues are considered to have the widest impact on micro enterprises (1-9 employees) but, at the same time, these reasons become less and less important for the small enterprises and later increase in significance in relation to the firm size.

The key characteristic of the second group concerns the absence of any correlation amongst the level of barriers and firm size (Figure 2-10). Incompatibility of systems and a lack of reliable IT providers are probably more related to external factors such as the IT context maturity to which the firm belongs than to its size.

5. The hampering factors proposed by EBW 2006 are: cost of technology, security problems, legal issues, systems incompatibility, company size, technology complexity.

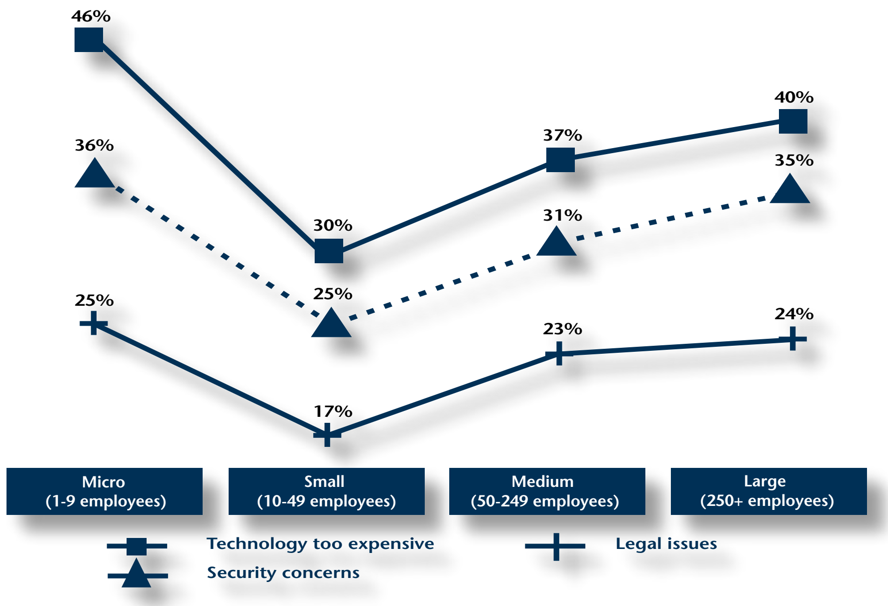



Figure 2-9 - Barriers to eBusiness adoption as perceived by companies (Source: eBusiness W@tch 2006)

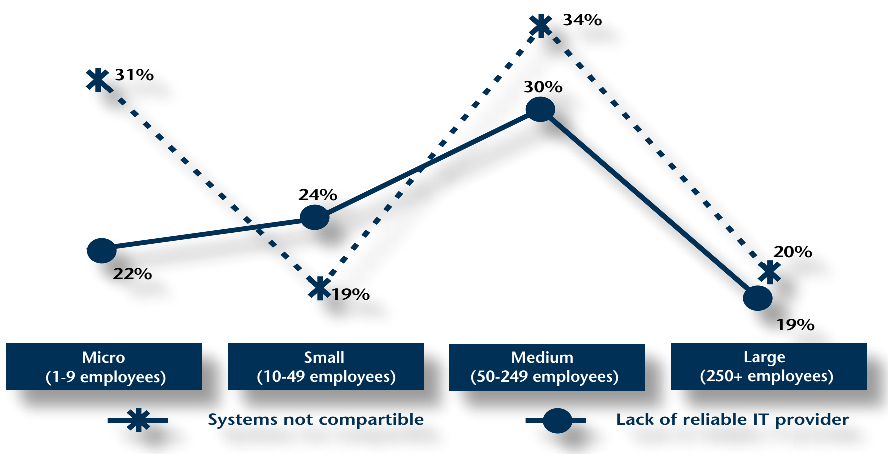



Figure 2-10 - Barriers to eBusiness adoption as perceived by companies II (Source: eBusiness W@tch 2006)

The key obstacles in the third group are those (inversely) correlated with firm size (Figure 2-11). The first reason, small dimension of company, is self-evident; the second one, complexity of the technology, seems to have a slowly decreasing impact on SMEs and then loses importance in the LEs.

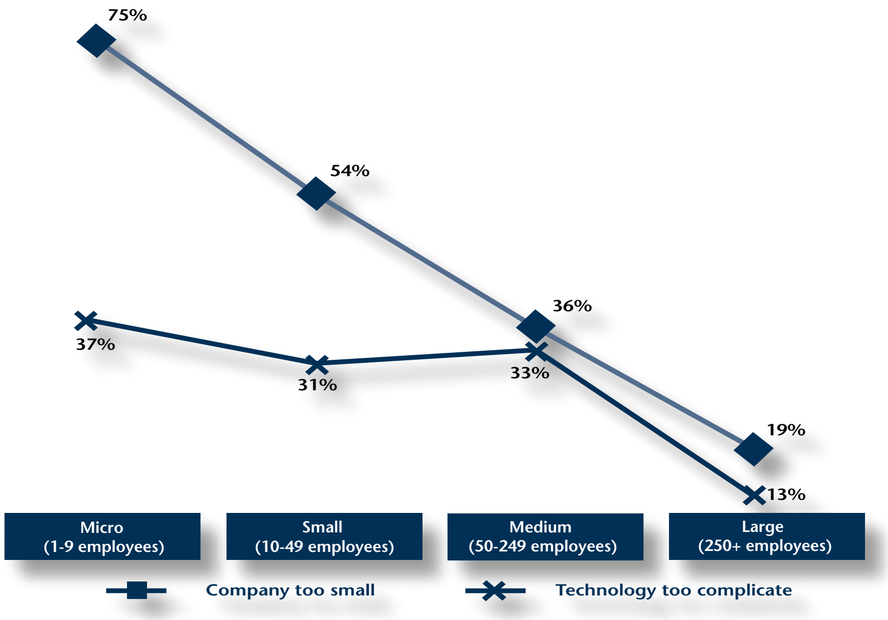



Figure 2-11 - Barriers to eBusiness adoption as perceived by companies III (Source: eBusiness W@tch 2006)

*The specific characteristics of SMEs are very clearly highlighted, both in the enabling factors and in the hampering factors. Two factors determine the take up of eBusiness and need to be carefully considered in the design of technological solutions: firm size and the organisation's capability to deal with technological complexity. To put SMEs in the position to reap the benefits of eBusiness solutions these two factors need to be taken into account by consultants and suppliers.*

*In a static view, they represent an upper limit to the SMEs' technological development, but one must also consider that:*

- *there is a lot of scope for technological development for most of the European SMEs before they reach their structural limits;*
- *the technological improvement in general and the eBusiness adoption in particular contribute to the firm development and growth, raising the threshold of technological limitations.*

## 2.3.5 Do the SMEs consider eBusiness to be a valuable solution?

A growing number of SMEs are waking up to the potential benefits of enterprise software and services that would have been used previously only by much larger organisations. In this respect, it's important to recognize that at present the SMB market is growing faster than the enterprise one.[6]

Rising operational costs, insufficient access to capital and growing competition is threatening the bottom lines of small and medium-sized businesses worldwide, and is forcing many SMEs to re-evaluate their potential advantages and adapt their core business strategies to maintain competitiveness. An AMI Partners study [7] notes that SMEs' current market developments are forcing them to rethink their technological investment objectives in order to stay dynamically competitive in the ever-changing marketplace.

From the demand side, SMEs currently face the same competitive pressures as large enterprises: managing a more mobile workforce, customer retention and increasing revenues from services. According to AMI research "Most CEOs at small businesses (SBs, in this specific case, companies with up to 99 staff) and IT managers at medium businesses (MBs, in this specific case, companies with 100 to 999 staff) now face many of the same challenges that their counterparts at large enterprises encountered some years ago"[8]. For SMBs, technological solutions surely represent a way to be more productive and professional to compete more successfully in today's global economy.

The market capability of the SMB segment can be summarised in a few numbers provided by the same AMI partners' study. SMB spending in North America, Europe and Japan will surpass large business IT spending in 2007 and the forecasts on the worldwide IT spending by SMBs anticipates growth rates of 10% in 2007. Over the next three to five years, the global retail industry will struggle with change in the mid-market sector (firms with 100 to 999 employees), which will drive significant growth in key areas of IT consumption.

Discussing the complexity of conquering the SMB segment, Richard Pitt, area director at Alcatel, says that vendors are doing their bit to overcome SMEs' worries about the complexity and cost of IT. Alcatel has developed systems that integrate technologies such as voice over IP into a single box, providing smaller companies with access to the same advanced technology as larger enterprises. The cost and complexity of IT is a concern many vendors are aware of, a challenge they have accepted. Pitt acknowledges that selling to SMEs is not easy.

*Information and opinions on the interest in eBusiness solutions demonstrate that many enterprises have understood the potential gain in adopting technologies for raising productivity and, in turn, competitiveness.*

*To overcome the issues of technology complexity and costs, almost all the IT suppliers and providers are working to provide SMEs with appropriately sized and configured eBusiness solutions.*

6. These estimates of the SMB segment refer to enterprises with 1 to 999 employees.
7. AMI Partners Press Global IT/Telecom Forecast Model, Q1-2007
8. AMI Partners 2006-2007 SMB surveys

## 2.4 The European eBusiness market: looking at the eBusiness providers' perspective

### 2.4.1 Do the eBusiness providers have any interests in the SMB segment?

Obviously, the fact that SMBs now face many of the same challenges that their counterparts at large enterprises encountered some years ago doesn't imply that the technological solutions for the largest enterprises can also suit the smallest ones. "Enterprise solutions vendors must understand the different needs and sophistication levels of these segments and craft go-to-market strategies with products, marketing, channels and pricing aligned to the needs of each segment"[9].

Until recently, it was clear that eBusiness products for small and medium-sized businesses were nothing more than enterprise products with reduced functionalities.[10] IDC's Annonier also pointed out that SMBs normally have difficulties with cut-down enterprise software solutions. "Some vendors have tried to repackage large suites for the SMB space and that hasn't worked so well," he said. "Some of the large software companies, such as Oracle and SAP, are getting it right by specifically developing offerings for the SMB space."

At present, all the main IT players that are looking to grow have to seriously consider the SMB segment because growth is going to come from areas such as adopted market strategies, lines of development, marketing and technical actions. "The SMB market is the new frontier for everyone in the IT industry, whether it's Microsoft, SAP or IBM," commented Laurent Lachal, the open-source research director for analyst firm Ovum.

Therefore, there is strong evidence that IT suppliers are increasingly striving to get into the SME market, seeing it as a major new source of revenue. At the same time, increasing numbers of small firms want to put their business online and "virtualise" their functionalities. In a recent survey by Sage, 61% of small businesses said that being seen as an eBusiness would be good for their image and 51% said it would open up new opportunities and markets. But 42% were unclear about the most effective way to move from where they are today to where they want to be in terms of eBusiness.

The analysis shows that the suppliers have recognised that meeting SMEs' demand is not simply satisfied by the re-scaling of applications and packages, but that it is necessary to implement a consistent support infrastructure for the management of the project. Suppliers now know that they have to design their eBusiness solutions in such a way so that the SMEs can take advantage of them, even with their limitations in personnel and dedicated skills.
Suppliers now do not simply rescale products, but adopt strategies to take the complexity out of the products. Another strategy adopted by suppliers is to provide comprehensive support integrating, for example, financial services.

Despite the increase of activity, Gartner lead analyst, Craig Baty, said that IT suppliers "had made plenty of mistakes as they sought to chase SMBs. This was paving the way for smart channel operators. Some suppliers tried a one-size-fits-all solution instead of looking at a real business solution.

9. AMI Partners Press Release
10. Ken Presti (Network World) 21 May, 2007. www.arnnet.com.au

Others thought SMBs would be price sensitive on everything, but that's more of a consumer attitude. SMBs will spend money if it's justified."

One of the most important challenges is to find technological solutions that fit the SMB budget. To this purpose, some of the largest IT suppliers have implemented a strategic response.

Microsoft Financing is the company programme which helps enterprises to deal with monetary investments in IT projects.(11) SMEs have to counter several financial constraints. Microsoft is promoting several initiatives in cooperation with their partners and with the financial and banking system, specifically tailored to the needs of SMEs. The programme, based both on a mere financing mechanism and on a financial leasing, is available to all customers, regardless of their size and typology and concerns projects for software and hardware purchase, consultancy services, integration and training.

## 2.4.2 What are the market strategies of the largest eBusiness providers?

The big IT suppliers in mature economies such as in Western European are battling against a slow-to-moderate top line growth by turning to different strategies: innovative customer acquisition, retention tactics, new target markets segmentation/definition and multi-channel retail. In particular for the SMB segment, the challenge is driving these firms to increase their investments in customer relationships, business intelligence, data warehousing, wireless and online transaction solutions.

These findings therefore confirm that all eBusiness suppliers have a strong orientation to develop their SMB segments but, in contrast to the recent past, they are aware of the complexity of the segment and of the need to tailor their supply and market strategies carefully to reach this specific enterprise target group.

The head of IBM predicted his company's main vertical business will be with small to medium-sized businesses within a couple of years. It is expected that the company's small to medium-sized business (SMB) operation will become the vendor's biggest industry focus within a couple of years.(12)

The re-organisation for the SME market has in a certain sense been a must for the biggest IT supplier with a horizontal market strategy. Dave Batt(13), Senior Vice President and General Manager of Global CRM at Sage says: "We are already in the CRM marketplace. What has gone on is upmarket vendors like Siebel and with the consolidation of Oracle all the more so, have saturated their market. So they either have to come down, or look to mergers and acquisitions to grow. At Sage we're growing."

The adopted strategies for approaching the SME market include facilities for all the categories of resellers and directly for customers.

With regards to partnership, for instance, Avaya is making changes not just to its product lines but also to its channel marketing programmes, says David Spiby, Avaya's director of strategy.(14) As regards facilities for business customers of a smaller size, Avaya has turned to licence on demand. Previously, Avaya's products tended to be focused on hardware, acknowledges David Spiby. "Now, we provide licence keys so that it is easy for our business partners to simply turn on those new applications without a lot of extra work. We've also added some management capabilities so that it is easier for partners to manage, which lowers the cost to them."

11. 7/7/2007
12. China Martens (IDG News Service) 02 May, 2007. www.arnnet.com.au
13. Interview: Dave Batt, Senior Vice President and General Manager of Global CRM, Sage MyCustomer.com 08-Nov-2005
14. www.computerweekly.com


In some cases, the reorganisation of the strategies refers only to the distributors, looking at the quality of the marketing network. As EMC [15] declared, "more resellers will want to play with the technology because they are dealing with organisations that have 25-50 people. Our intent is to access markets with resellers but to do that you need to have the right technology for them". As far as the VAR network is concerned, EMC states that "the strategy is to have a partner community that does good business with us and its customers".

In other cases, such as that of IBM, the reorganisation does not only concern the external strategy to provide technological solutions to SMEs, but it also refers to structural change in the supplier internal organisation. IBM has created the Small and Medium Business Division, dedicated to SMEs, with 500 employees in Italy and a network of business partners. IBM separates operations for enterprises and small businesses and is revamping part of its sales organisation to target the small to medium-sized business (SMB) market [16] more successfully. The same structural reorganisation of IBM for the SMB segment has been implemented by Oracle and SAP. Oracle dedicates an SME-focused offer based on a go-to-market model, leveraging the vertical and local competencies of the Oracle partner network. [17] Since June 2005, Oracle has established the SME Technology Business Unit in Italy, a "division (that) has the objective to push the Oracle Technology in the lower market segments" says Clara Covini, Vice President of SME Technology Business Unit. "Furthermore we have implemented Oracle Direct, devoted to the direct contact with SMEs".

SAP, after introducing products tailored to meet the needs of smaller businesses, aims to follow through on marketing and support with a new dedicated unit – Global SME. The unit was launched in January 2007. [18]

*Having recognised the specific needs of SMEs in terms of products, the analysis shows that the most important ICT providers and suppliers are trying to gain market shares in the SMB segment. The investment strategy of the most important players shows that the SMEs' target will represent the challenge for the coming years.*

### 2.4.2.1 Specialisation of the ICT solutions and niche markets

To take advantage of the emerging SMB market, IDC software market analyst Chris Chong says that some form of specialisation is a must. "If I was an SMB reseller I would focus on vertical expertise driven by industry needs," he said. "I would also use the Web and e-marketing; the Internet is the main channel for SMBs looking for a solution." Furthermore, a particular analysis of the business needs of the customers becomes of greater importance, as different technologies become more tightly integrated and applications become more vertically focused, and thus the process of identifying the right solution for the customer increases its complexity.

The specific organisational and technological setup of SMEs/SMBs requires a specific approach to the implementation and deployment of eBusiness tools [19] on the part of suppliers, providers and vendors.

15. From the Top: EMC's David Webster - New challenges in SMB. Brian Corrigan 31 July, 2007. www.arnnet.com.au
16. Robert Mullins, IDG News Service. www.computerworlduk.com
17. Pino Fondati Corriere delle Comunicazioni. Corriere della Sera 17.07.2007
18. November 14, 2006. www.computerworld.com
19. Deni Connor (Network World) 18 June, 2007. www.arnnet.com.au

In this specialisation process, some leading IT companies provide most of their solutions also for the SMB target group, while others have only a few products for this segment.

For instance, Microsoft has launched ERP for small businesses.[20] Entrepreneur will provide smaller organisations with finance, purchasing and sales and marketing software. It's aimed at companies employing up to 49 staff and tops out at five concurrent users, according to Barb Edson, director, Microsoft Dynamics. Microsoft says that Entrepreneur itself was more than just a scaled-down version of Dynamics NAV and had been specially developed for small businesses, particularly in terms of cutting back on the need for users to heavily customise the software.

Novell is releasing its first desktop-and-server suite for small businesses.[21] The Novell Open Workgroup Suite Small Business Edition is based on Novell's SUSE Linux distribution and includes the company's Open Enterprise Server for storage, user and rights administration, and clustering and failover capabilities. On the desktop, the suite includes the SUSE Linux Enterprise Desktop, the OpenOffice.org productivity suite and Novell's GroupWise software for e-mail and a calendar.

In many cases, the specialisation of products becomes customisation through services. The latest IBM offering is also following this trend. IBM aims to provide SMEs with complete, integrated solutions, not only products. The example in terms of specific eBusiness products for SMEs [22] is the eServer Integrated Platform for eBusiness, intended to help smaller companies quickly build and implement Linux-based solutions around SUSE Linux's version of the open source operating system.

### 2.4.2.2 Integration of the ICT solutions and channels

To deliver a truly customised solution, it's more important than ever for providers and suppliers to understand how the business works and determine how technology can augment those efforts. With a bit of extra focus, and perhaps some extra dialogue, customers will be the beneficiaries of this trend favouring the SMB space.

Due to their size, SMEs don't show the same organisational complexity of the large ones in term of formalised business processes and functional areas. A solution adopted by the IT suppliers has been the integration of two or more functionalities in the same ICT solution. The software applications utilised by most medium-sized companies do not allow business data to move easily across departments. Most medium-sized companies manage their business on separate, unintegrated software packages – one for accounting, one for warehousing, one for sales force management and one for customer support – and then spend even more money to tie them together. The cost of implementation, integration and on-going application maintenance in such environments can be many times the cost of the software itself.

These considerations have led the main IT suppliers to two different integration strategies for the SMB segment:

- Integration of products and functionalities
- Integration of solutions and services

20. China Martens, IDG News Service. 11 July 2007.
21. Jeremy Kirk (IDG News Service) 15 June, 2007 www.arnnet.com.au
22. www.computerweekly.com. Technology Enterprise Software. Posted: 10 May 2002

The offer from NetSuite follows the first type of integration strategy. NetSuite Inc., as a vendor of on-demand, has integrated business management application suites that provide ERP (Enterprise Resource Planning), CRM (Customer Relationship Management) and e-commerce functionality for small and medium-sized businesses and divisions within large companies. The success of the integration of functionalities is demonstrated by the fact that more medium-sized companies continue to migrate to NetSuite from Microsoft Dynamics GP (formerly named and commonly referred to as Great Plains) solution.(23) These companies switched for a variety of reasons including ease of use, reduced cost (due to NetSuite's software on-demand delivery model) but especially for NetSuite's one-system with a financial management approach which integrates ERP, CRM, and e-commerce.

On the other hand, the eServer Integrated Platform for eBusiness provided by IBM is a typical example of comprehensive solutions and services for the SMB target group. IBM also provides business and eBusiness start-up funding and works together with about 2000 business partners as well as with the large independent software vendors – ISV, as well as with local resellers specialising in specific markets and sectors.

According to Dave Batt, Sage is also shifting its strategy towards integration between solutions and services for SMEs.(24) "We're ramping that up. The approach the company had taken before was product-centric. When we had integration points, we'd go back to customers and they'd sort of shrug their shoulders. Now when we go back and say we have integrated processes in order-to-cash, they get this."

*The main common strategies, adopted by the largest players for the SMB segment, are two-fold: specialisation in eBusiness solutions for SMEs, offering a product with most functionality customised on the SMEs' requirements and integration. The integration strategy has been applied on two levels. On the one hand, integration concerns different functionalities. An SME eBusiness product presents functionalities that for the largest enterprises target group are available only by combining many products. On the other hand, integration occurs offering a customised service for each firm's needs.*

### 2.4.3 Do the small eBusiness providers take advantage of local proximity?

The key variable in approaching the SMB market segment is the proximity to the largest number of enterprises. From this point of view, the small and medium-sized ICT suppliers have a certain competitive advantage with respect to the biggest ones.

Historically, most SMBs have turned to smaller local players for eBusiness solutions, but in 2007, major ICT suppliers – including IBM, HP and others – will increasingly capitalise on this opportunity. These big players will expand their managed services portfolios with new infrastructure, help desk, storage, security and other offerings, tailored to meet the SMB solution, packaging and pricing requirements, and sold via their channel partners.

Rob Enderle, principal analyst at Enderle Group in San Jose, Calif., for one, said this area of the market is seen as a "huge untapped opportunity"(25) But he said the largest IT suppliers might face obstacles: "Large firms have had a great deal of difficulty relating to small companies and the cost of each sale, as a percentage of that sale, remains daunting." Enderle claimed that the small to medium-sized

23. San Mateo, California, July 26, 2007. www.netsuite.com/portal/press
24. Interview: Dave Batt, Senior Vice President and General Manager of Global CRM, Sage MyCustomer.com 08-Nov-2005
25. Brian R. Hook 09/29/05

markets are still often best served by value-added retailers, which are basically small companies that put software systems together for other small to medium-sized firms.

## 2.4.4 How do the largest eBusiness providers reply to the proximity problem?

The marketing solutions, already adopted by the largest players for the distribution of ICT solutions for the retail and general enterprises market, are essentially two-fold:

- they rely on a network of resellers
- they provide solutions online such as Software As A Service (SAAS)

### 2.4.4.1 Attempt to offer local proximity: network of resellers

Due to the impossibility of the largest IT players and the multinationals to interact with the innumerable SMEs, the opportunity to make profit is also open for the resellers. According to a recent IDC survey [26] on the SME sector, SMB-focused resellers and systems integrators will have new business opportunities within the applications sector in the year ahead.

"There is massive potential for resellers to capitalise on this market but only if they understand the requirements of small businesses," comments Richard Pitt, area director at Alcatel.[27]

Channel partners will have to invest in building integration and business consulting skills, and to maintain a market advantage. In addition, they will partner with large manufacturers, such as IBM and HP, who are increasingly standardising many basic IT services, and providing partners with opportunities to resell these services and add value around them.

For instance, HP have a declared strategic role of its partners being able to ensure wide geographical coverage, supply competences and experience, consulting and "client proximity"[28].

The partnership strategies of the biggest IT suppliers on the reselling networks are numerous, also corresponding to the ICT solution provided:

- Simple resellers' network. If the eBusiness solutions for SMEs have a high rate of standardisation, the IT suppliers' market strategies are focused on the cooperation and partnership with simple resellers.
- Value Added Resellers (VARs), Value Added Providers (VAPs) and Systems Integrators (SIs). As far as the increasingly customised products are concerned, their manufacturers are more focused on the cooperation and partnership with integrators and value-added resellers (VAR) that serve the SMB market.

The partner's network has a key role in the SMB segment strategy at Oracle.[29] "Our partners have been a critical element in our success in the SME market," Tino Scholman, Vice President, SME Applications, Oracle EMEA says. "We are confident not only of delivering increased business to our existing partners but also of meeting our targets for expanding the network to achieve the expected growth."

The Oracle business model for SMEs is centred on competencies and local market knowledge by partners. Oracle Certified Partners are those who will directly respond to SME needs, always in close connection with the experts at Oracle.

26. Rob Irwin 24 July, 2006 www.arnnet.com.au
27. www.computerweekly.com
28. Pino Fondati Corriere delle Comunicazioni. Corriere della Sera 17.07.2007
29. www.crm2day.com/news. 24 May 2005


### 2.4.4.2 Attempt to overpass local proximity: SAAS

SAAS is a viable alternative to the costs and complexity associated with legacy applications. In this way, the software is designed to reflect the business processes and workflows of a corporate environment, irrespective of the firm's technological architecture. As an alternative strategy adopted to reach the small businesses, some ICT players offer the software on demand through online access. While the road to Internet-based Software as a Service (SAAS) was a bumpy one in the early days, online services have become a credible – and often desirable – alternative to packaged software. SAAS players are thriving in multiple market segments, from the SMB segment to the large enterprise sector, and in almost every application category. As Internet-based computing becomes viable for an increasing array of individual and business requirements, customers can focus more on getting the functionality and outcomes they need from the application, and less on the underlying operating system, middleware and infrastructure requirements. In addition, many developers have chosen to build their SAAS applications on open source platforms and technologies.

It is undisputed that service integration into systems is a mainstream trend in supplies to SMEs. AIM Partners [30] confirm that SAAS suppliers will increasingly focus on how their solutions can help customers streamline business processes for market advantage. Leading suppliers will increasingly provide customers with patterns and best practices for business process improvement, pre-built integration solutions as well as more varied and flexible pricing options. By doing so, these suppliers will take advantage of the expected 19% rise in global SMB hosted SAAS spending over the next five years. The trend for the SAAS industry development is for growth, as top players such as Microsoft, Google, IBM and salesforce.com battle to build SAAS systems. At the same time, new SAAS players and solutions will continue to emerge, and the likelihood of any one player dominating this landscape is very low.

Analysts are not surprised that some big IT players moved relatively slowly in the software-as-a-service arena. The marketing model requires these IT suppliers to completely overhaul much of the underlying technology, licensing, partner and service assumptions that have historically shaped its very successful business. However, as more customers opt for SAAS solutions over licensed desktop and server products, suppliers too have no choice but to follow suit.

Salesforce.com [31] is pursuing an interesting strategy: it is splitting the need to buy its core product to use the company's online market for business software. This is intended to tap into the rising demand for web-delivered applications, but it is not without risk. This is an opening up of its online marketplace for host business software applications without needing to be a client of the Salesforce.com sales and marketing software. This should allow the company to collect royalties from its platform on a much wider base. It might even allow the company to sell more seats within organisations without the company itself having to build applications, and this will make the creation of more programs created for the online marketplace.

IBM, for instance, has a mixed strategy based both on strong involvement of partners and on SAAS.[32] In May 2007, IBM unveiled a new set of initiatives designed to help its partners develop and sell software-as-services (SAAS) solutions more effectively.

30. The top ten IT trends for global SMB markets. AMI Partners, New York, February 7, 2007.
31. April 23, 2007 www.247wallst.com
32. AMI - Access Market International Partners. 8 June 2005 News.

Microsoft has announced a newly rekindled interest in the Internet based applications area, positioning its initiatives as a hybrid "software plus services" model that will integrate – not replace – desktop and server-based software with Internet-based services.(33) The two are the vehicles through which it will unleash its online service solutions: Windows Live and Office Live. Office Live won't replace Microsoft's omnipresent Office desktop suite, but it will provide complementary services, both free and fee-based.

Meanwhile, SAP AG is working to deliver a credible SAAS story to the market.(34) Part of the problem is that SAP is too entrenched in its on-premise software mentality and perpetual licensing approach to make a dramatic shift to an on-demand model. These internal constraints will make it difficult for SAP to join the SAAS movement without significant development costs and a fundamental transformation of its business operations and corporate culture.

*The problem of local proximity to the potential SME customers has been solved by the largest IT industry players through a broad network of resellers and the internet accessibility opportunity.*

*In both cases, the focus is on the customised services that an SME could require. The resellers network guarantees competence regarding the product and assistance services, the SAAS providers offer, in terms of quantity and quality, eBusiness solutions based on the specifics of the firm.*

## 2.5 Market share of open source software

Gauging the market penetration of open source software is not really easy since in contrast to commercial software, sales figures don't exist for obvious reasons. In the vast majority of cases, open source software is being distributed over the internet. Download figures can help getting a general idea about a certain software's popularity but they are insufficient to judge on that software's true number of existing installations since not every downloaded copy will end up being actually used. The other way around, not every installation in use will have to be downloaded from the project's website since open source software can be freely redistributed by third parties. Very often, there are multiple independent websites offering the same application, further limiting the possibility to estimate market shares by download figures.

The only reliable way to get trustworthy numbers on open source software market share is by surveys. A number of studies have been conducted in the past, so there is at least some idea on the extent open source software is currently being used and by whom.

A 2002 study by Berlecon research(35), conducted in companies in the UK, Germany and Sweden showed that open source software usage highly differs across different countries. In Germany, open source software was a lot more popular than in the UK – 30.7% of all German SMEs used open source operating systems but only 8.1% of the UK based SMEs did the same. As a consequence it can be said that making general statements on open source software usage for Europe as a whole is difficult at best.

33. AMI - Access Market International Partners. News 9 November 2005. http://www.ami-partners.com
34. http://thinkitservices.blogspot.com. Monday, May 21, 2007
35. FLOSS User Survey, Berlecon Research, 2002

In general, open source software is currently more widely in use on the server than on the desktop. Across all three countries in the study, a total of 15.7% used open source server operating systems but only 6.9% used open source software on the desktop.

As for individual open source software products, some figures exist, gathered also mainly by surveys. The numbers clearly show that the market share of open source software greatly depends on the software class. Some examples are given below.

In the domain of webservers, open source software is clearly the market leader. According to Netcraft's survey, the open source webserver Apache had 58,9% market share (Microsoft IIS had 31.1%)[36]

As for the market share of the free operating system Linux, the available data is mostly not up to date. In 2004, the total market share of Linux on the PC market was estimated by IDC to be around 5%, projected to reach around 7% in 2008 [37] (which would mean it would overtake the market share of Mac OS which is around 6%). However, Linux is much stronger in use on servers than desktops, estimations for its market share in the server segment are as high as around 30%, also it's the most popular operating system to be installed on newly bought or installed servers. In general, the market share of Linux is expected to continue growing, although its penetration of the desktop market is progressing slower than with for servers.

For mail servers, the research done by Falko Timme shows a market share of popular open source mail servers such as Sendmail or Exim of around 50%.[38]

The web browser market, which was completely dominated by Microsoft's Internet Explorer a few years ago, with a market share exceeding 95% in 2004, got shaken up by the release of the open source alternative, Mozilla Firefox. The market share of Microsoft's browser has been declining ever since. It's currently around 71% while Mozilla Firefox has now around 12% market share [39] and continues growing significantly.

The market for office suites is still dominated by Microsoft Office, but Open Office is getting increasingly popular, particularly with SMEs. The current market share of Open Office in this user segment is estimated to be 19%.[40]

These examples show that open source software doesn't generally play a second rate role compared to commercial software. In some areas this type of software already dominates their respective markets. In some other areas, commercial software is still pretty strong.

36. http://news.netcraft.com/archives/2007/04/02/april_2007_web_server_survey.html
37. http://pascal.case.unibz.it/retrieve/1281/linux_market_overview.pdf
38. http://www.falkotimme.com/projects/survey_smtp.php
39. http://www.thecounter.com/stats/2007/April/browser.php
40. http://www.toptechnews.com/news/OpenOffice-org-2-0-Release-Delayed/story.xhtml?story_id=03100339SMZN

2.

## 2.6 Findings and conclusions

This chapter has highlighted the differences that the European SMEs currently face in adopting eBusiness solutions. The analysis has focused on the relevance of the market obstacles for enterprises and on the intrinsic characteristics of SMEs.

It has been shown that the technological context has a deep impact on the development of eBusiness. According to EITO data, the first 5 countries in terms of IT spending in Europe are the same as the countries in which eBusiness is more developed, while ICT per capita would appear to have less impact. The social technological development can be considered to be one of the drivers for the long-range eBusiness diffusion.

The difference amongst the leading countries is also reflected in the IT market concentration. In each country under analysis, there is a more or less evident market concentration due to the market power of the larger players and multinationals. Due to the large number of small and medium-sized enterprises in all the European economies, a low market IT concentration of the supply side leads to a strong customisation of the proposed solutions, while a high concentration indicates more standardisation. The eBusiness Index of EBW 2006 gives a quantification of the difference in terms of ICT adoption by European enterprises. Using 100 as a basis for large enterprises, 66 is the value of the eBusiness Index for the medium-sized enterprises, 49 for the small enterprises and 34 for the micro enterprises. Although the natural (and efficient) IT adoption rate for SMEs is probably lower than that for LEs, the gap between SMEs and LEs tells us that potential opportunities for ICT development in the small business sector are manifold.

The investigation on the adoption of ICT solutions and on the implementation into the typical business areas provides further indication on the main intrinsic technological weakness of SMEs. The results are that LEs adopt more ICT solutions in all the functional areas than the other firm size groups.

Interviews with the main players, their key statements, an analysis of market perspectives reports, a review of web articles and press-cuttings on the SMB segment strategies have demonstrated that the Small and Medium-sized Business segment is gaining more and more importance for eBusiness solution providers.

Specialisations of products and solutions and integrations of functionalities have been adapted to suit the particular characteristics of SMEs. Mainstream supply-side trends show that large software companies such as Oracle and SAP are getting it right by specifically developing offerings for the SME sector. Other suppliers such as Microsoft and IBM are increasingly working to provide comprehensive integrated technological services.

As has been shown, the concrete approach to the SME market adopted by the main IT players is largely related to the local proximity problem. Typically, the large IT suppliers operate through 2 different, but not alternative, marketing channels, with the first one based on the physical proximity of resellers and partners and the second one relying on solutions on the web.

The competition for the SMB segment is at different levels. It involves the incumbent multinationals directly, but also the local small suppliers and, in turn, the resellers and partners of the largest IT companies. This competition represents a driver for the SMEs and for their eBusiness adoption, assuring the effective matching between supply and the enterprises' needs and making the ICT solutions affordable in terms of costs – also for the smallest firms.

As open source software is concerned, it should always be included in the decision making process when choosing software. In many scenarios, open source software can lead to considerable savings or bring strategic advantages. Any decision should always be based on a profitability and benefit analysis. Very often, popular commercial software is just being bought and installed based on the sole reason that this software is widely diffused and well known – thus considerable advantages which could come with open source alternatives are possibly being passed on.

Open source software is most certainly gaining market share, particularly in the server area. The market share of open source databases and server operating systems will probably grow dramatically. On the desktop, the growth process will probably take longer since commercial software is still strongly entrenched in this environment. Particularly in the area of office suites, the established commercial products have such a strong market share that there is considerable peer pressure on users to use the same systems. Thus, open source alternatives are currently less widely in use in the desktop environment than on the server.

Open source software is being threatened by the current efforts by the software industry to fight their open source competition using the patent law and non-disclosed data formats, protocols and hardware specifications. Here, open source software developers suffer from not having enough influence on relevant legislation processes, particularly in the area of the patent law.

A very positive aspect for open source software is the increasing acceptance of this kind of software in public institutions. Here, open source software is being introduced in large numbers, sometimes the administration of entire countries is migrating towards open source software architectures. Also, several large technology firms openly support free software and include it into their business models – often also participating in the development of free software or sponsoring relevant projects. Large companies adapting and developing open source software is considerably helping in freeing this kind of software from the old and very wrong image of being "Hackerware, not suitable for serious use".

# 3. Selection of eBusiness products & Services

## 3.1 Approach for product and service selection

Companies striving to improve their business processes, introduce IT-based process innovations, or integrate with their business partners and customers will benefit from appropriate IT solutions developed specifically for their functional areas and business processes. How should a company or an advisor to a company proceed in selecting the right product and service provider?

Companies can choose between an individual software solution developed by a software firm based on individual company requirements and selecting an appropriate standard software product. More often than not, a company will prefer to buy a standard software product. This is due to the fact that, in most cases, the standard product will turn out to be significantly more economical – considering the life-cycle cost, which includes the maintenance of the software, the required knowledge, the availability of standard interfaces, etc.

The individual needs of a company on the one hand, and the large number of standard software solutions available on the other, will mean that the selection process for the appropriate solution will involve matching the individual company needs with the product features of the individual software solutions. In most cases, there will not be 100 % match and the selection will have to be based on the "best" match. Furthermore, a standard product may have to be configured to the company needs and may have to be integrated with existing IT solutions.

Often small and medium-sized companies will not have the knowledge or resources available to carry out the configuration, adaptation, or integration work by themselves. Not only a product but also a service provider may need to be selected – and this selection may become as important as the selection of a standard software product itself. It should be mentioned that some products can be bought as a service – e.g. as an SAAS model (software as a service) or an ASP model (application service providing). This may be an attractive solution, because a company would not have to maintain the software itself and would not need to provide IT hardware or operation support.

Due to the fact that there is no "best" product (or service provider) in general but only a "most appropriate" product based on individual company requirements, a global benchmarking of eBusiness products and services is not possible. Instead, a company needs to define its individual requirements and evaluate each product and service provider based on these requirements. The ever-increasing importance and cost of the product to be introduced and the project to be implemented, combined with the comparative limited knowledge within the company itself, will lead to increased involvement of external consultants.

We therefore introduce a six-step standard product selection process, depicted in table 3-1. The six steps consist of:

1. developing eBusiness strategy and focus
2. documenting and prioritising product, supplier and process requirements
3. identifying and pre-selecting products and suppliers
4. analysing detailed information and quotations
5. arranging supplier presentations and evaluating selected products
6. negotiating the final contract

| | Definition of eBusiness strategy and focus | Specification of requirement & priorities | Identification & pre-selection of products and suppliers | Analysis of detailed information and quotations | Presentation & evaluation of selected products | Negotiation & contracting with selected supplier(s) |
|---|---|---|---|---|---|---|
| **Result** | • eBusiness strategy<br>• most important eBusiness project | • requirement specification (with priorities) | • market overview<br>• list of pre-selected products and suppliers (e.g. 10 suppliers) | • analysis of quotations<br>• reduced list of products and suppliers (e.g. 3-5 suppliers) | • detailed analysis of small number of products/suppliers<br>• decision regarding final negotiations (with 1-2 suppliers) | • final negotiation with supplier(s)<br>• contract with supplier |
| **Stake-holders** | • company executives<br>• head of e-business<br>• external consultant | • project team<br>• external consultant | • project team<br>• external consultant | • project team<br>• external consultant<br>• suppliers | • project team<br>• buying centre (employees relevant for the decision making process)<br>• external consultant<br>• suppliers | • project team<br>• supplier(s)<br>• responsible executive (e.g. CEO/CIO)<br>• project team |
| **Activities** | • identify market, technology and customer trends<br>• analyse current eBusiness capability, e.g. by best-practice benchmarking<br>• identify lines of eBusiness action based on company strategy and rank possible projects<br>• set-up one project with goals and project team | • design characteristics of future processes<br>• identify product and supplier requirements<br>• identify process requirements<br>• identify financial requirements<br>• prioritise requirements<br>• define example scenarios for evaluation<br>• document results | • identify relevant products and suppliers<br>• screen suppliers and products<br>• pre-select interesting suppliers and products based on major requirements<br>• create product and supplier questionnaire (if applicable) | • contact the pre-selected suppliers<br>• send questionnaire or request for quotation (RFQ) including own requirements<br>• receive information and quotations (deadline)<br>• analyse and evaluate information and quotations<br>• select products/suppliers for next step | • invite favourite suppliers for product and scenario presentation<br>• conduct product presentations<br>• evaluate and rank products and supplier, e.g. based on a scorecard or utility analysis<br>• decide on desired product and supplier | • conduct bilateral negotiations with the favourite supplier(s)<br>• finalise quotation<br>• fix negotiation results aspects in contract<br>• make final decision<br>• inform and contract supplier(s)<br>• finalise project and team for introduction phases |
| **Tools and supporting information** | • benchmarking<br>• industry best-practice<br>• state-of-the-art reports<br>• spreadsheets, cost/benefit analysis<br>• project management | • market studies<br>• supplier's website<br>• market studies<br>• documentation softw.<br>• standard requirement listings | • market studies<br>• suppliers' websites<br>• spreadsheets, decision matrix | • questionnaire<br>• spreadsheets, decision matrix | • spreadsheets, decision matrix<br>• presentations | • model contracts<br>• service level agreements |
| **eBSN eBusiness Solution Guide support** | • company benchmarking with eBusiness competence index (EBCI)<br>• overview of possible solutions based on business processes<br>• list of consultants | • basic information on products in categories and product features<br>• list of consultants | • basic information on products in categories and product features<br>• supplier information and link to supplier and product websites<br>• community opinion and experience | • supplier and product characteristics<br>• community opinion and experience | | |

Table 3-1 Selection process for eBusiness applications

The table includes the individual activities for each step together with stakeholders, appropriate tools and information sources. The table also shows how the eBSN eBusiness Solutions Guide supports the selection process and individual activities. The eBSN eBusiness Solutions Guide also includes a community feedback feature, which provides additional (subjective) information on individual products based on individual opinions of technical experts or other companies.

Phases two to four can be supported by standard requirement listings and spreadsheets, which implement the utility analysis method (based on decision matrices). The following paragraph includes an example for a utility analysis.

The sixth step is the last step of the selection process but not of the end of the product introduction. The "selection phase" is followed by an "introduction phase", which will cover the following additional tasks:

- verify and detail technical specification
- verify and detail process design
- adapt, configure and integrate product (or service)
- train employees
- carry out organisational and process changes (or introduce new processes)
- carry out pilot test
- start live operation and improvement
- verify cost/benefit calculations or estimates

It is important to note that the whole process is not only about selecting the right product or service provider. It is – at least – equally important to design the appropriate future business processes and activities and evaluate the product based on these process requirements. Moreover, one of the most common mistakes within the whole selection process is that products are selected based only on technical requirements and nice (but unnecessary) product features, but not based on process and company requirements. In this case, the future processes may have to be adapted to the product, which may result in additional, unnecessary use of personal resources and inefficient processes.

## 3.2 Utility analysis

The product and service selection process introduced in the previous paragraph uses a multiple step approach for product and supplier selection. From step two (specification of requirements) until step five (evaluating selected products) different solutions are compared based on general criteria and company specific requirements. In early process steps a small number of criteria will be applied to a large number of choices whereas in later stages the evaluation criteria will be very detailed with only a small number of solutions to be compared.

This paragraph introduces the »utility analysis« methodology – a very systematic approach to compare and evaluate several eBusiness solutions. The method described here is a supplement to the information provided as part of the eBSN eBusiness Solutions Guide. The result of the method is a ranking of the eBusiness solutions to be evaluated based on their »utility« for an individual usage scenario. Following this method of utility analysis will also provide for a detailed understanding of the individual solutions being evaluated.

For easy selection processes and small investments the utility analysis method may be too complex. It is recommended for important eBusiness applications and significant investments. The method is often used by consultants and company advisors but may also be applied by SMEs themselves.

The utility analysis method evaluates and ranks a significant number of possible solutions based on a defined list of criteria. It can be applied to a large number of selection procedures, in which individual requirements or goals have to be met and the deviations have to be evaluated. In the case of the product and supplier selection, the criteria are the requirements defined as part of step two of the selection process.

The criteria and their weights are typically defined by the future users of the eBusiness application in cooperation with some IT professionals. It may be advisable to get help from an external consultant, especially for SMEs which are not very knowledgeable regarding typical functionalities of the eBusiness application to be selected or which lack relevant IT skills.

There are two types of selection criteria: the first type consists of criteria which are generic so that they can be applied to all kinds of product or supplier selection tasks (e.g. price, services). Some of these criteria are shown as entries in table 3-2 illustrating the method of utility analysis.

The second type of criteria has to be defined for the individual product class under consideration (e.g. an online shop can be evaluated regarding technical features such as shopping cart, number of products supported, support of integration standards for payment, billing etc.). These criteria may be deducted from market studies or information material and functionality descriptions provided by product suppliers. The criteria may also be based on company specific tasks and process steps, which should be supported by the new eBusiness software.

**Evaluation sheet (example)**

Date

Evaluated by

Scoring scale: 0 - non existent, 1 - insufficient ... 5 - very good

| Category | Criteria | Weight<br>0 - not necessary<br>1 - less important<br>...<br>10 - very important<br>main categories in % | Max. score | Product A<br>score indiv. | Product A<br>score weighted (and cat. sum) | Product B<br>score indiv. | Product B<br>score weighted (and cat. sum) |
|---|---|---|---|---|---|---|---|
| **Supplier** | | **20%** | 290 | | 203 | | 209 |
| | Company focus | 8 | 40 | 4 | 32 | 3 | 24 |
| | Company size | 2 | 10 | 2 | 4 | 3 | 6 |
| | Founding year | 5 | 25 | 2 | 10 | 3 | 15 |
| | Financial strength and stability | 8 | 40 | 4 | 32 | 4 | 32 |
| | Industry branch experience | 7 | 35 | 3 | 21 | 5 | 35 |
| | Knowledge regarding product/project | 9 | 45 | 5 | 45 | 3 | 27 |
| | References | 8 | 40 | 4 | 32 | 3 | 24 |
| | Responsiveness | 8 | 40 | 3 | 24 | 5 | 40 |
| | Certificates | 3 | 15 | 1 | 3 | 2 | 6 |
| | ... | | | | | | |
| **Product features (application category specific)** | | **20%** | 75 | | 70 | | 50 |
| | Feature A | 10 | 50 | 5 | 50 | 3 | 30 |
| | Feature B | 5 | 25 | 4 | 20 | 4 | 20 |
| | < typically many individual features ...> | | | | | | |
| | ... | | | | | | |
| **Product features (across categories)** | | **10%** | 365 | | 229 | | 276 |
| | Interfaces | 10 | 50 | 2 | 20 | 5 | 50 |
| | Integration possibilities | 8 | 40 | 5 | 40 | 4 | 32 |
| | Standards supported | 8 | 40 | 0 | 0 | 4 | 32 |
| | Usability criteria (user interface, help system ...) | 9 | 45 | 4 | 36 | 3 | 27 |
| | Reliability criteria (technology, architecture, ...) | 9 | 45 | 3 | 27 | 5 | 45 |
| | Performance Criteria (number of users, response time, hardware requirements...) | 6 | 30 | 5 | 30 | 4 | 24 |
| | Security criteria (access restriction, role models & rights system, encryption ...) | 8 | 40 | 2 | 16 | 2 | 16 |
| | Technology (database, operating system, ...) | 5 | 25 | 4 | 20 | 4 | 20 |
| | Documentation | 10 | 50 | 4 | 40 | 3 | 30 |
| | ... | | | | | | |
| **Process support** | | **10%** | 75 | | 60 | | 69 |
| | Support for process A application scenario A) | 9 | 45 | 4 | 36 | 5 | 45 |
| | Support for process B application scenario A) | 6 | 30 | 4 | 24 | 4 | 24 |
| | ... | | | | | | |
| **Services** | | **10%** | 295 | | 250 | | 248 |
| | Consulting services | 8 | 40 | 3 | 24 | 4 | 32 |
| | Installation services | 10 | 50 | 5 | 50 | 3 | 30 |
| | Configuration services | 10 | 50 | 5 | 50 | 5 | 50 |
| | Customisation services | 8 | 40 | 5 | 40 | 5 | 40 |
| | Integration services | 3 | 15 | 3 | 9 | 5 | 15 |
| | Training services | 6 | 30 | 2 | 12 | 5 | 30 |
| | Telephone support services | 5 | 25 | 4 | 20 | 3 | 15 |
| | Maintenance services | 9 | 45 | 5 | 45 | 4 | 36 |
| | Operation support services | 0 | 0 | 3 | 0 | 2 | 0 |
| | ... | | | | | | |
| **Quotation and presentation** | | **10%** | 210 | | 177 | | 154 |
| | Quotation: level of detail | 8 | 40 | 5 | 40 | 5 | 40 |
| | Quotation: completeness | 10 | 50 | 4 | 40 | 2 | 20 |
| | Implementation time frame | 7 | 35 | 3 | 21 | 5 | 35 |
| | Presentation and demonstration of product | 8 | 40 | 5 | 40 | 4 | 32 |
| | Match with application scenarios | 9 | 45 | 4 | 36 | 3 | 27 |
| | ... | | | | | | |
| **Price** | | **20%** | 145 | | 120 | | 99 |
| | Licensing model | 6 | 30 | 5 | 30 | 3 | 18 |
| | Product price | 10 | 50 | 4 | 40 | 4 | 40 |
| | Customisation price | 5 | 25 | 2 | 10 | 5 | 25 |
| | Maintenance & support price | 8 | 40 | 5 | 40 | 2 | 16 |
| | ... | | | | | | |
| *Total score, unweighted* | | | 1455 | | 1109 | | 1105 |
| ***Total score, weighted - sum over categories of (weighted score category sum / max. score in category * category weight)*** | | **100%** | | | **80%** | | **74%** |
| *Rank* | | | | | **1** | | **2** |

Table 3-2 Utility Method

Table 3-2 gives an example for a utility analysis, comparing and ranking two individual suppliers and products. The utility analysis evaluation method is typically carried out by the company employees involved in the selection process. The employees may be supported by external consultants. The method is conducted in the following steps:

- define main categories of criteria (column A); additional subcategories may be useful for large evaluation projects
- define individual product, supplier and process criteria within main categories (column B); standard criteria can be found on the eBSN eBusiness Solutions Guide provided as part of the eBSN Internet platform, in market studies or as part of product descriptions; it is important to use the criteria relevant for the individual SME and business process to be supported;
- define a scale being used for weights for the evaluation of individual criteria (typically scales from 0 to 5 or 0 to 10 are used, reflecting an importance range form „unimportant" to „very important"); the weight could also be expressed in percent (see „weight" column of main categories in example)
- define a scale being used as the score for each product (typically scales from 0 to 5 or 0 to 10 are used, reflecting the degree of fulfilment from „non existing" to „excellent")
- define the value for each individual weight, which reflects the importance of each individual criterion (column C); make sure to mark criteria which are so essential that they must be met ("essential criteria"); for more complex selection procedures, a separate weight value or percentage value should also be assigned for the individual categories (marked as grey rows in the table).

For a multiple step evaluation process such as the one proposed above, the criteria may be detailed or updated during the evaluation process. Typically, the number of evaluation criteria is low at the beginning for the pre-selection process and more detailed for later steps of the evaluation process.
The manual evaluation process is carried out once for each individual product and supplier and consists of filling in the individual scores for one product and each criterion. The conducting of the individual evaluations includes:

1. assigning values for each evaluated product/ supplier and each individual criterion (it may be done by several people in parallel; the individual results are then discussed and consolidated);
2. calculating the whole number of points by adding the weighted sums;
3. checking for the complete fulfilment of the "essential criteria";
4. ranking individual product evaluations;
5. deciding on product/supplier based on ranking (price may be "essential criteria"; decision may consider individual results again).

This methodological approach ensures that all major aspects are covered during the selection process and the company can base the decision on facts. The method reduces subjectivity during the selection process and ensures that the company gets the best possible results for the financial resources to be invested.

# 4. eBSN eBusiness Solutions Guide for matching eBusiness supply and needs of SMEs

## 4.1 Overview

This chapter describes the properties of the eBSN eBusiness Solutions Guide. The tool provides two main functions depending on the type of user: the information acquisition from eBusiness solution providers and the eBusiness Guide functionality for SMEs. These main functions are supplemented by community functionality and administrative functionality.

The information acquisition functionality aims at collecting as much information as possible from providers of eBusiness solutions concerning their software and service offerings. This is mainly targeted at producers and distributors of solutions and their consultants. But also associations, universities, research institutes and even private persons can enter information. Entering data into the eBSN eBusiness Solutions Guide can easily be done by registering at the website and giving information by filling out some forms.

The eBusiness Guide functionality for SMEs will help SMEs or their advisors to find suitable eBusiness solutions tailored for the specific characteristics and needs of the company (for example, based on the number of employees or industry sector). Several search functions are included in the tool.

## 4.2 Main tool functionality

This paragraph gives an overview of the major modules provided online as part of the eBSN eBusiness Solutions Guide.

### 4.2.1 Information acquisition functionality

**Registration for the platform**

Solution providers and persons who want to evaluate products need to register themselves on the platform. They can register via a form that includes some obligatory fields and a legal notice that has to be checked. After registration, an e-mail will be sent with an activation link.

**Add, change and delete producers, OS-projects, products and services**

If the solution provider has chosen to register himself as a producer of software and services, he can only manage his own profile. If he is otherwise registered (e.g. as a sales partner or consultant – see chapter 4.5 for further details of the roles) he may enter records for several producers.


Figure 4-1 Screen for adding products or services

If products are not developed by commercial companies (e.g. Open Source projects) there is the possibility to enter Open Source projects instead of a producer. Registered users also have the opportunity to comment on and evaluate products. Figure 4-1 shows the screen for adding products or services to the tool.

After input of the producer data, new products or services of this producer can be entered. All data can be printed, edited and deleted. If a producer or project is deleted all their products and services will also be deleted.

For more details on information acquisition functionality for marketing eBusiness products see chapter 4.5.

## 4.2.2 eBusiness Guide functionality

**Search for solutions and get information about products, suppliers and services**

The EBCI (eBusiness Competence Index) is used to assess the level of eBusiness maturity and to receive consultation hints. Using these hints the user can look for appropriate solutions which will take him to the next level of eBusiness maturity and a better EBCI value. The EBCI is calculated by answering several questions concerning the company's technical infrastructure.

For searching products and services the text based search is the easiest way to perform a basic search. This method does not include any consideration of characteristics of the company performing the search.

For a more focussed product or service search the detailed search function is provided. This method supports fields to enter company characteristics (such as the industry sector, number of employees etc.) and characteristics of the solutions searched (such as operating system, price, producer etc.).

The result list is categorized (e.g. to SME fit, product category, evaluation results and price).

Another search function to find a fitting solution is the hierarchical access. Here, the user can enter the product or service category via a tree or drop down menu. All registered products or services for this category will then be displayed.

For more details on different search possibilities and the use of the EBCI see chapter 4.6.

## 4.2.3 Community feedback functionality

**Registration to the platform**

Companies and persons who want to comment on products or evaluate products need to register. They may register via the registration form for evaluators. After registration, an e-mail will be sent with an activation link.

**Comments and evaluation of product**

The products may be evaluated by registered users. For using the evaluation function, the search functionality is used to access a product and then the "evaluate" button allows inputting experience and comments on the product.

For more details on community based product feedback see chapter 4.7.

## 4.2.4 Administration functionality

The tool's administrator has the right to disable users and their entries. He can also see an overview of all the registered persons and can access statistics about the usage.

4.

## 4.3 User roles

Users of the eBSN eBusiness Solutions Guide can act in different roles depending on the type of user.

**User roles for the information acquisition functionality**

Producer: Producers are registered users who can enter or delete eBusiness products or services which are developed by their own company. They can edit their producer data and print all collected information. Like all registered users they can evaluate products and calculate the company maturity.

Other: Others include sales partner/distributor, service provider/consultant, member of an association, university or private persons. They can enter products or services from several producers or Open Source projects. Others have all the rights of a producer and the possibility to add more producers or Open Source projects to the platform.

**User roles for the eBusiness Guide functionality**

SME User and unregistered users: These users can choose between several search functions: text search, detailed search for a product, service or producer or the hierarchical search. Further on, users can calculate the maturity of their company. If users want to input data on own products or services offered or to comment on products they have to register as “producer”, “evaluator” or “other”.

**User role for community functionality**

Evaluator: Evaluators are registered users who can comment on and evaluate products.

**User role for administrative functionality**

Administrator: Administrators have all the rights of the other roles and additionally can disable users and their entries of them. They can view statistics of the usage.

## 4.4 Business processes and product categories

A three-level hierarchical classification system has been designed for categorizing the eBusiness products offered and relate them to the SME business processes. The details on this classification are shown as part of annex B. The classification consists of the following three levels:

- functional area (related to organizational units of a firm);
- business process;
- product class.

The matching functionality of the eBSN eBusiness Solutions Guide is based on the correspondence relationships between the business process classification of the demand side (SMEs searching for solutions) and the supply side product classes.

This hierarchical classification is also used as part of the eBSN eBusiness Solutions Guide to find products through the category tree being part of the detailed search and the hierarchical access.

**Classification design methodology**

From the eBusiness demand side, the potential SME needs have been structured according to functional areas and business processes of the SME represented by the first two levels of the classification system. Due to the fact that businesses, and particularly Small and Medium Enterprises, are organised in extremely different ways, according to different structures and based on very different hierarchies, a general classification poses a considerable challenge. Nevertheless, a general classification of a firm’s organisation has been set up on the basis of:

1. research of the most common organisational models, looking at those developed by the main consultancy companies and research centres on enterprises;
2. a survey of the corresponding processes and technological categorisation for the information systems and infrastructures in enterprises in general and in SMEs in particular;
3. a synthetic descriptive model, leading to the issue of a multilevel classification concerning:
    1. functional areas of the organisation
    2. business processes
    3. product classes

The definition of a comprehensive model for the structure of the enterprise and its main functions is a complex task. Even if all business functions can be found in every business organisation, their mapping onto organisational areas, departments or offices can be extremely heterogeneous from one organisation to another. Furthermore, the hierarchy of functions can be variable. Even so, two principles have guided the functional area model design:

1. The specific needs of the Small and Medium Enterprises, which normally have a less structured organisational articulation than Large Enterprises;
2. The requirement of a general reference model, simple enough but nevertheless representative of the demand side and also capable of supporting the match with the eBusiness solutions and services.

For this purpose, a large number of business organisation models have been considered to establish the following nine key functional areas:

1. General Management
2. Sales and Marketing and Customer Service
3. Research and Development (R&D) and Engineering
4. Production
5. Procurement, Logistics and Distribution
6. Information Management and IT
7. Human Resources
8. Accounting, Finance and Asset Management
9. Cross Functional Area

The next step has been the identification of specific technological application solutions implemented to support the business processes in the different functional areas.(41)

For example:

- **Customer Relationship Management** (CRM) systems have been classified as applications for the Sales and Marketing and Customer Service functional area and with a specific role in the Sales and Marketing process;
- **Enterprise Resource Planning** (ERP) solutions have been classified as applications for the General Management functional area and with a specific role in the General Management process;
- **Billing and Invoicing Applications** have been classified as applications for the Accounting, Finance and Asset Management functional area and with a specific role in the Accounting and Finance process;

41. The table in annex B provides a detailed description of business processes belonging to each functional area identified.
The table will be the starting point for the identification of the applications and their matching with the organisational characteristics

From the eBusiness supply side, IT solutions have been classified with a newly designed classification system based on the following internationally recognised classification systems:

1. the United Nations SITC (Standard International Trade Classification) and the integrated CPC (Central Product Classification);
2. the European Union Nimexe and the integrated CPA systems (Statistical Classification of Products by Activity);
3. the harmonised SA systems and the combined nomenclature NC.

All classifications have been constructed in a consistent and coherent way to guarantee the correspondence of supply with the real requirements of demand. This means that the level of detail of the classification, and therefore the number of sub-classifications, is very much related to

1. the descriptive needs of the classification;
2. the chance to find corresponding classes on the supply side;
3. the likeliness of finding information and quantitative data to make the classification operational.

## 4.5 Marketing eBusiness products on the supply side

The eBSN eBusiness Solutions Guide gives suppliers of IT products and services a great opportunity to promote their offers. Simply by entering the relevant data, they can reach all European countries. The use of the eBSN eBusiness Solutions Guide is free and it is hosted by the European Commission Europa server under the eBSN portal.

This chapter provides more details on the information that will be collected in the eBSN eBusiness Solutions Guide by the information acquisition function. The function aims at collecting eBusiness product and service solution details. For certain information, standardised classifications are used as a basis. All input data (content) is associated with a specific country. For the eBSN eBusiness Solutions Guide, each EU country has one associated user interface language and one content language. The first release of the eBSN eBusiness Solutions Guide has a user interface in English, French and German. Other European languages will be added later. Detailed information on suppliers and products will be collected; the data should only be inserted in the language that is associated to the country where the product is offered. Suppliers who want to offer products and services in several countries need to enter information for each country separately.

During the registration, suppliers of software or services can choose between two different roles: producer and other:


Figure 4-2 Role selection in the eBSN eBusiness Solutions Guide

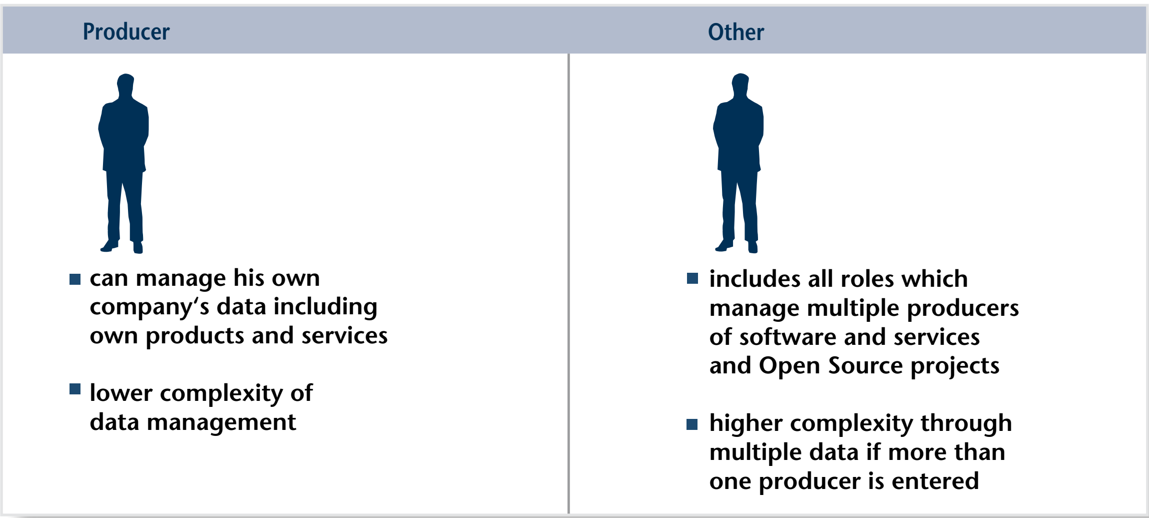



Figure 4-3 Main differences between the user roles „producer“ and „other“

Figure 4-2 shows the realisation of the role selection in the eBSN eBusiness Solutions Guide (the role "evaluator" is described in chapter 4.6). Figure 4-3 shows the main differences between the roles.

The "producer" represents a company that has developed one or more products or offers services and is interested in free promotion. Producers can only enter products from their own company.

If the registration was made as "other", the user is not a producer of software and shall specify the concrete role. The tool gives some proposals as to which role is possible (see Figure 4-2). Multiple selections and – if the options are not suitable – an entry of a role in a free-text field are possible. Please note that there are no functional differences between the options of the check boxes at the "other" role. The information is just used for statistical analysis. If the user does not want to specify the role, he just needs to select "other" and can skip the check boxes. The "other" role has more rights than the "producer", but also has to deal with more menus and information. Users with this role have the possibility to enter multiple producers and Open Source projects. This is interesting for distributors of products or services of several companies, consultants offering services related to several products from other producers, associations wanting to help their members in promoting themselves or universities/research institutes developing products and wanting to publicise them. Every registered user is assigned to a specific country and language. Several locations in different countries for the same supplier can be dealt with by multiple supplier registrations.

## 4.6 Search and self-assessment for SMEs on the demand side

The eBSN eBusiness Solutions Guide offers an easy way to find software or IT services for a specific country. The eBSN eBusiness Solutions Guide and its content will be available in all major European languages. Furthermore, SMEs can assess their company's eBusiness maturity. The result includes hints on how to improve the maturity. The use of the eBSN eBusiness Solutions Guide is free and is hosted by the European Commission Europa server, under the eBSN portal. Many features of the tool can be used without registering or entering personal data.

The user needs to select the country in which he wishes to find solutions. The product and service entry was made country-specific by the suppliers, so the search functions will only find solutions for the selected country. Figure 4-4 shows the options that a user will find in the menu.

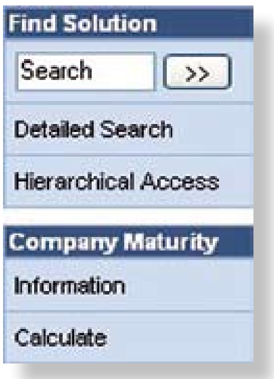



Figure 4-4 Search function in the eBSN eBusiness Solutions Guide

Users requiring software or services have several possibilities to find solutions by using the eBSN eBusiness Solutions Guide. They can find solutions through a simple text search by entering one or more keywords and the tool will search for this in the product and producer entries. Users can also specify the search request by giving more information to the system via the detailed search. Figure 4-5 shows the screen of the detailed search for products. Further options are the search for services, producers or Open Source projects. For a better matching of the search results to the requirements of the company, the user can enter information concerning the industry sector and the number of employees of his company.

Another possibility to find solutions using the eBSN eBusiness Solutions Guide is the hierarchical access using the process, product and service classifications. The main difference from the detailed search is that users do not have to enter details concerning the search. They only need to know in which product or service category they want to find solutions, select this or several further categories and the eBSN eBusiness Solutions Guide will then search for entries that are assigned to the selected categories.

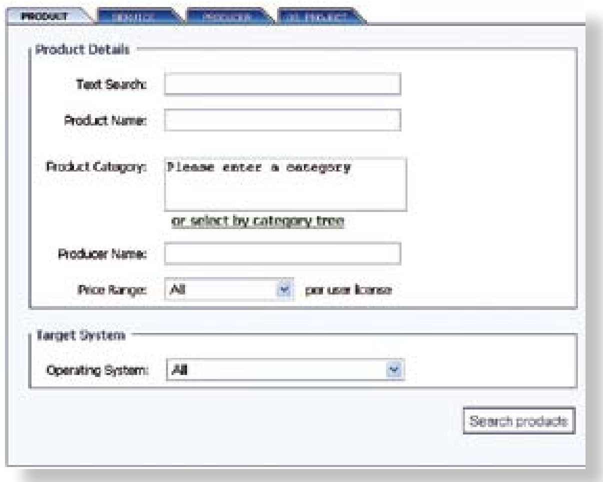



Figure 4-5 Detailed search for products

If users do not really know where to start with searching for products or in which sectors of their infrastructure they need support, they can assess the company's eBusiness maturity to see where the company has deficits. This is very easily done by just answering 16 multiple choice questions concerning the IT infrastructure of the company.

An eBusiness Competence Index (EBCI) will be calculated showing as a result a number between 0 and 1 and some hints for upgrading the infrastructure. With these hints, the user can search suitable products.Table 4-1 summarises the options of the search functions.

| Free Text Search | Detailed Search | Hierarchical Access | Company Maturity |
|---|---|---|---|
| • user has no detailed knowledge or no time for using one of the other search functions<br>• result lists for products, producers and Open Source projects | • user has a more concrete idea what to search for than in the free-text search<br>• search options: product, service, producer and Open Source project<br>• result lists are specific for industry sector and number of employees of the user | • user only needs to know the product or service categories in which he wants to find a solution<br>• results are listed for the suitable categories | • user neither knows concrete search details nor categories in which he wants to search and uses the EBCI calculation with several hints for improving the business for the search access<br>• EBCI is not a classical search function but provides access for users who do not know where to start the search |

Table 4-1 Overview of the search functions

## 4.7 Community based product evaluation and feedback

The tool has a function to comment on and evaluate products. Generally, all registered users (producers, evaluators, others) build a community. This community is encouraged to provide comments based on personal experience with products and rank the products. The possibilities for commenting and ranking are shown in Figure 4-6. Figure The evaluation is done by giving the product a grade and writing a short text.

The evaluation should be entered in the language that corresponds to the country of the product offer. The list of evaluations can be reached from the detail screen of the product concerned.

If a user registers as "evaluator" only, he may not input data on products. Figure 4-7 summarises the characteristics of the role "evaluator".

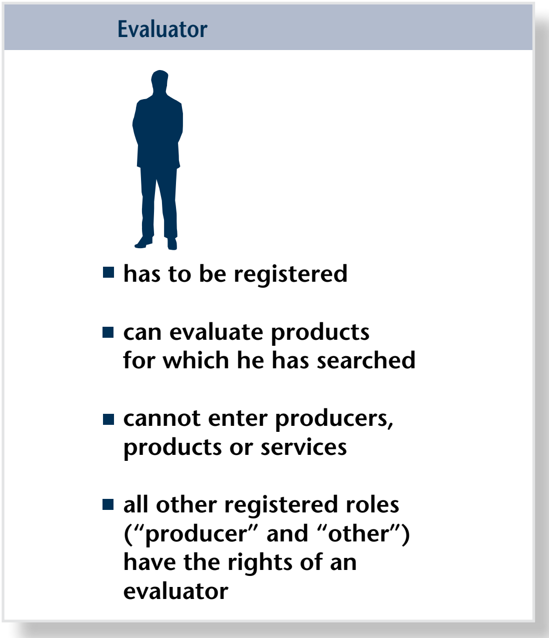



Figure 4-7: The user role "evaluator"


Figure 4-6: Evaluation screen

# eBusiness Guide for SMEs

# 5. Key user scenarios

The purpose of this chapter is to support potential users of the eBSN eBusiness Solutions Guide in their use of the tool and give them examples of its operation and functionalities. The three scenarios presented describe typical usage of the eBSN eBusiness Solutions Guide. The three scenarios will use information at a different level of detail and will demonstrate the matching and indicate what the output will look like.

For this purpose, we describe three scenarios in which the firm's technological manager or the external consultant is looking for the right eBusiness solution. In these scenarios the firm's user characteristics will be considered according to:

- The firm's country of origin;
- Firm size (micro, small, medium);
- Industrial sector;
- User ICT competence and search ability (search by solution, by functional area and by results of the eBusiness Competence Index).

It is important to keep in mind that the user scenarios described in this chapter are only a small sample of the potential solutions which the eBSN eBusiness Solutions Guide will be able to provide. The tool is designed in such a way as to provide effective answers to the need for identifying eBusiness solutions for Small and Medium Enterprises. In addition, the tool incorporates further diagnostic features, providing indications to enterprises according to the output of the eBusiness Competence Index.

The content and user interface language of the screenshots used in this chapter are in English. The final eBSN eBusiness Solutions Guide uses other languages according to the country.

## 5.1 User scenario 1 – Searching for eBusiness software by categories

The hypothetical enterprise of this user scenario is characterised by a low technological level. It's a micro enterprise with 8 employees, 4 external collaborators and 1 administrative consultant. The firm operates in the sector of olive oil production in the district of Nicosia (Cyprus) and its production mainly goes to the wholesale market. The new innovative technologies applicable to the olive oil production process induce the firm manager to improve the company's effectiveness by introducing a computerised logistics workflow. He has heard about eBusiness solutions being able to integrate the production process with the warehouse management. His firm has been informed by a member of CITEA (Cyprus Information Technologies Enterprises Association) about the opportunities provided by the eBSN eBusiness Solutions Guide supported by the European Commission and eBSN. The firm manager approaches the eBSN eBusiness Solutions Guide, ignoring which kind of search methods he can exploit to find the right eBusiness solution.

The website of the eBSN eBusiness Solutions Guide describes the scope and the target of the platform and anticipates the oportunity to adopt different criteria for finding solutions. The firm manager chooses Cyprus as the home country (Figure 5-1).

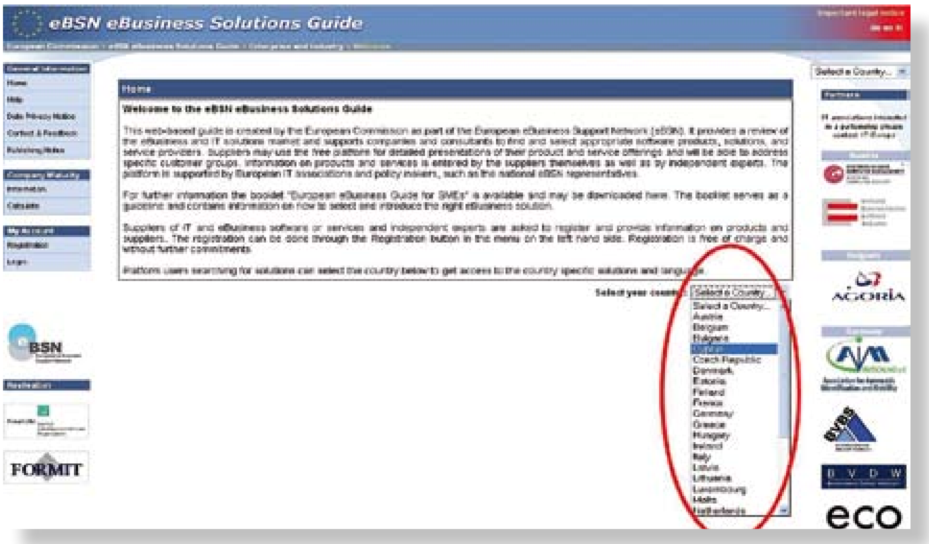



Figure 5-1 – eBSN eBusiness Solutions Guide home page

Figure 5-2 illustrates the detailed search criteria. The firm can insert general data about the industry sector to which it belongs and the number of employees. In this user scenario, the firm manager will choose “Agriculture, hunting and foresting, fishing” and the employees group from 1 to 10.

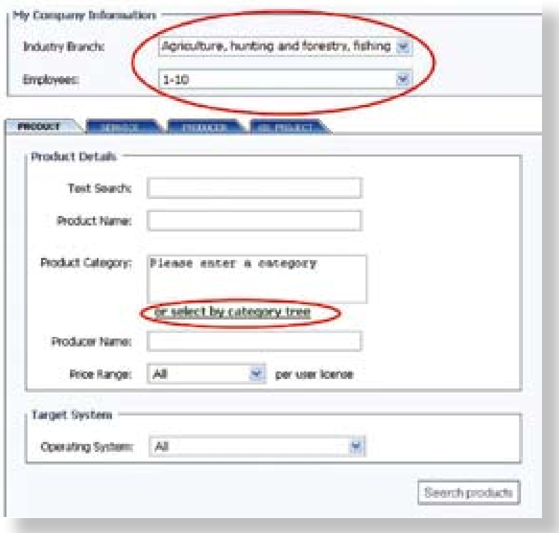



Figure 5-2: eBSN eBusiness Solutions Guide search page

He is not interested in providing other information on his firm and, ignoring the name of products or producers offering eBusiness solutions for logistics and warehousing, decides to search the product category using the suggestions given by the category tree.

The category tree allows the user to fill in the product category field with the right keywords. The pop-up window (Figure 5-3) shows the list of the selected business processes in which all the firm’s processes can be synthesized. In addition, each business process could be expanded in a more detailed level of functionalities.

Due to the fact that the Cypriot firm manager is interestend in warehouse solutions he will proceed with the following steps. He will choose “Procurement Logistics and Distribution” and then “Distribution and warehousing”. He clicks on “Inventory management” because he thinks that this meets his condition best and finally on “Save selection and close the window”.

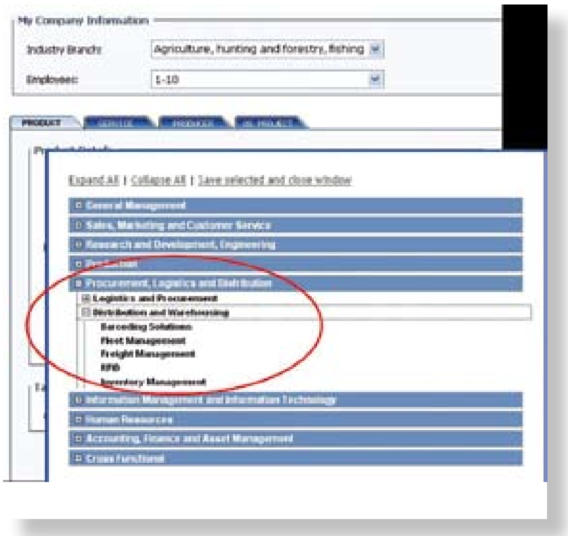



Figure 5-3 eBSN eBusiness Solutions Guide processes pop-up

By clicking on the "Search products" button, the eBSN eBusiness Solutions Guide will present all the eBusiness solutions entered by European ICT suppliers in the inventory category.

For each product, the eBSN eBusiness Solutions Guide will provide:

- Name of product;
- Brief description of the functionalities and user target;
- SME fit (a judgment of the provider/supplier on the firm group that could exploit the solution better);
- Category (useful if more than one business process is selected);
- Evaluation (from 1 to 5);
- Price group (from 1 to 5).

The firm manager has the opportunity to get a representative picture of the eBusiness products supply in inventory management available in Cyprus. The results are ranked according to the criteria of the search. That means that the manager still has to check the results in relation to his requirements. After selecting a suitable product, he can refer to the producer's or the distributor's website for more details.

In this case, the eBSN eBusiness Solutions Guide has been successful in closing the information gap of the SME and in presenting different solutions.


## 5.2 User scenario 2 – Using the eBusiness Competence Index

The firm looking for the right eBusiness solution is located in Berlin and produces watchbands. The firm is a medium-sized enterprise with about one hundred employees. It produces and sells watchbands all over Europe to the most important watch producers. Most of the firm functions are computerised, but the director is interested in improving the productivity through eBusiness solutions. He asks his IT manager to look for eBusiness products capable of improving the firm's performance.

The head of the IT division has read the latest newsletter from Bitkom (the German Association for Information Technology) about the eBSN eBusiness Solutions Guide supported by the European Commission, made available to European SMEs to provide a wide range of eBusiness solutions and give indications on the level of eBusiness maturity of SMEs.

The IT manager approaches the eBSN eBusiness Solutions Guide, looking for the right method to evaluate the firm's technological evolution level.

Inserted to the left of the website of the eBSN eBusiness Solutions Guide, the menu "Company Maturity" catches the IT manager's attention. Reading the "information" section on the company maturity, he discovers that the so-called "eBusiness Competence Index" is precisely what he needs.

The eBusiness Competence Index (or EBCI) is a synthetic indicator to estimate the development potential of the smallest productive units improving performance by automating their business processes through the adoption of eBusiness products and services. In addition to the dimension of ICT pervasiveness, the EBCI gives a measure of the propensity to upgrade or adopt eBusiness. SMEs are classified into "Low eBusiness-capability firms" [42], "Medium eBusiness-capability firms"[43] and "High eBusiness-capability firms"[44 (see page 65)].

The EBCI is based on compound indicators measuring the eBusiness maturity of 4 strategic technological areas of a firm:

- the ICT infrastructure and basic connectivity (ICTBC indicator);
- the Internal business process automation (IBPA indicator);
- the Procurement and supply chain integration (PSCI indicator);
- the Marketing and sales processes indicator (MSP indicator).

The result in terms of eBusiness capability of the enterprise builds on the answers to a questionnaire which inquires into the level of implementation of some of the most important eBusiness solutions. The SMEs have to answer 16 questions (4 per strategic technological area) in detail on the characteristics of their potential ICT endowment and facility to adopt eBusiness solutions (Figure 5-4).

There are 4 possible answers:

- the ICT solution has already been implemented;
- implementation or deployment is in progress;
- implementation is planned in the near future;
- implementation has neither been considered nor planned.

To fill in the questionnaire, the IT manager has to click on the "calculate[45 (see page 65)]" button in the "Company maturity" menu.

42. The firms characterised by low eBusiness competence have basic or no ICT structure and connectivity and are those that have planned a mid term business strategy not focused on ICT adoption. For instance, they are enterprises with only few eBusiness solutions for the management of internal processes and with a general future design to use online services for selling; or enterprises with low connectivity and little interest in internal and external business automation. All these characteristics are consistent with very small enterprises that operate in traditional sectors on local markets.

43. The group of medium eBusiness competence firms encompasses enterprises with a more formal structure for the management of ICT endowment and those with a dynamic ICT oriented strategy. These firms have at least bandwidth internet connectivity, some automatic procedures for production and administration management, a minimum structure for e-commerce and an on-going process of ICT adoption.

**E-Business Competence Index (EBCI)**

| | | never considered | in planning | in realization | already implemented | |
|---|---|---|---|---|---|---|
| **ICT Infrastructure and Basic Connectivity Indicator (ICTBI)** | | | | | | |
| 1. | Do you have a LAN (Local Area Network) connectivity between the computers in the enterprise? | ○ | ○ | ○ | ◉ | ? |
| 2. | Do you have a high-speed internet access (1024 kbit/s or higher)? | ○ | ○ | ○ | ◉ | ? |
| 3. | Does your company offer the possibility of a remote access to the company's network? A remote access is realised via a telephone wire (ISDN, analogue). This type of connection is common for SMEs with just one main office. | ○ | ○ | ○ | ◉ | ? |
| 4. | Does your company offer the employees an access via a VPN (Virtual Private Network)? A VPN offers an access via the internet. It could be realised for example with a DSL line. It is usually implemented in firms with more than one office. | ○ | ○ | ○ | ◉ | ? |
| **Internal Business Process Automation Indicator (IBPAI)** | | | | | | |
| 5. | Do you have an intranet (websites that are only accessible within your company)? | ◉ | ○ | ○ | ○ | ? |
| 6. | Do you use online technology to track working hours and/or production time?* | ○ | ○ | ○ | ◉ | ? |
| 7. | Do you use EDM systems (Enterprise Document Management System)? | ◉ | ○ | ○ | ○ | ? |
| 8. | Do you use ERP systems (Enterprise Resource Planning System)?* | ◉ | ○ | ○ | ○ | ? |
| **Procurement and Supply Chain Integration Indicator (PSCI)** | | | | | | |
| 9. | Do you purchase online e.g. via procurement marketplaces or portals (at least 5% of the total purchase volume)? | ○ | ◉ | ○ | ○ | ? |
| 10. | Do you use specific ICT solutions for e-procurement beside the ones from question 9?* | ○ | ◉ | ○ | ○ | ? |
| 11. | Do you use SCM systems (Supply Chain Management System)?* | ○ | ○ | ○ | ◉ | ? |
| 12. | Do you manage your capacity and inventory online?* | ◉ | ○ | ○ | ○ | ? |
| **Marketing and Sales Processes Indicator (MSPI)** | | | | | | |
| 13. | Do you use a CMS (Content Management System) for the website?* | ◉ | ○ | ○ | ○ | ? |
| 14. | Do you use CRM software systems (Customer Relationship Management System)?* | ○ | ○ | ○ | ◉ | ? |
| 15. | Do you sell online e.g. via an online shop (at least 5% of the total sales volume)?* | ○ | ○ | ◉ | ○ | ? |
| 16. | Do you use specific ICT solutions for marketing and sales processes beside online shops?* | ◉ | ○ | ○ | ○ | ? |

Figure 5-4 - eBSN eBusiness Solutions Guide EBCI questionnaire

The IT manager of the given firm has all the information required to complete the questionnaire.

The watchband firm has already implemented all the ICT infrastructure and basic connectivity proposed solutions. They also use online technology to track production time, but they have never thought about an intranet solution, about an Enterprise Document Management System and about an Enterprise Resource Planning System.

They are planning to adopt dedicated solutions to purchase online from their suppliers to integrate their Supply Chain Management System, but they would prefer to stick to their traditional system to manage capacity and inventory.

The marketing and sales process relies on a website managed by an external IT company. They have just implemented a Customer Relationship Management system, waiting for a system for selling watchbands online to definite, regular customers.

44. The higher class is for enterprises that already manage a large part of business exploiting the ICT opportunities. This means, for example, a good level of connectivity (LAN, bandwidth, etc.), the automation of the most relevant business processes, an effective relevance of e-selling in the marketing strategy and a strategic role of e-procurement in the supply chain management.

45. Four compound indicators are obtained by the weighted combination of the variables listed above. In detail: the ICT infrastructure and basic connectivity indicator (ICTBI) is composed of the variables 1, 2, 3 and 4; the Internal business process automation indicator (IBPAI) of the variables 5, 6, 7 and 8; the Procurement and supply chain integration indicator (PSCI) of the variables 9, 10, 11 and 12; and the Marketing and sales processes indicator (MSPI) composed of the variables 13, 14, 15 and 16. For each variable, four possible cases are presented: the ICT solutions have already been implemented: value 3; there is an implementation or deployment in progress: value 2; the implementation is planned in the near future: value 1; the implementation has neither been considered nor planned: value 0. Normalising the sum of the 4 variables in the single indicator (dividing by 12, the maximum possible sum), all the 4 indicators range from 0 to 1. The eBusiness Competence index is composed of all the 4 indicators with the same weights (0,25) and ranges from 0 (SMEs with no eBusiness Competence) to 1 (SMEs with the maximum eBusiness Competence).

By clicking on the "Calculate your EBCI" button, the IT manager will learn that:

- the overall value of the EBCI of the firm is 0.52;
- the firm belongs to the medium eBusiness Competence group;
- the ICT infrastructure and basic connectivity (ICTBC) indicator (that ranges from 0 to 1) equal to 1;
- the internal business process automation (IBPA) indicator value (ranging from 0 to 1) is equal to 0.25;
- the procurement and supply chain integration (PSCI) indicator (ranging from 0 to 1) is equal to 0.42;
- the marketing and sales processes indicator (MSP) indicator (ranging from 0 to 1) is equal to 0.42;
- the internal process ICT adoption capability (sum of ICTBC indicator and IBPA indicator) is 1.25;
- the eCommerce capability (sum of PSCI indicator and MSPI indicator) is 0.83;
- the value of the ratio between the internal process ICT adoption capability and the e-commerce activities capability [46] is 1.5;

as a benchmark, the user of the tool is also informed about

- the mean value of the EBCI of all the SMEs that have used the tool;
- the mean value of the 4 indicators of the SMEs that have used the tool;

and if the user enters further data about his company, he will find out

- the mean value of the EBCI of the SMEs equivalent in size that have used the tool:
- the mean value of the EBCI of the SMEs from the same industry that have used the tool.

It must be emphasised that the calculations are embedded in the tool and only the relevant results are shown to the user.

The tool tells the IT manager how his firm is positioned in respect to the average results for firms that have accessed the eBSN eBusiness Solutions Guide and calculated their EBCI. He also learns that the firm's weakness is in the internal business process automation and that the eBusiness solution adoption in the firm is in a static phase.

The IT manager now has a picture of the firm's technological situation and is in a better position to assess what kind of technological solution his company needs to improve productivity. He can also take advantage of the automatically generated proposals the tool provides regarding the most suitable eBusiness solutions for firms with a low internal business process automation indicator.

46. The value less than 1 indicates a greater ICT adoption in internal processes, the value more than 1 a greater ICT adoption in external processes.

## 5.3 User scenario 3 – Products in different countries

The third user case involves a specific technological requirement of a small Danish company. The company was founded less than a year ago in Copenhagen and employs some of the most highly qualified Danish graduates in the field of environmental studies. The core business of the company is the provision of studies and research work at European level on the socio-economic impact of the solutions to produce energy and to reduce air pollution.

The management is in the process of structuring the firm into research divisions. A local area network is needed to connect all the computers assigned to the researchers and a server on which documents can be saved and shared.

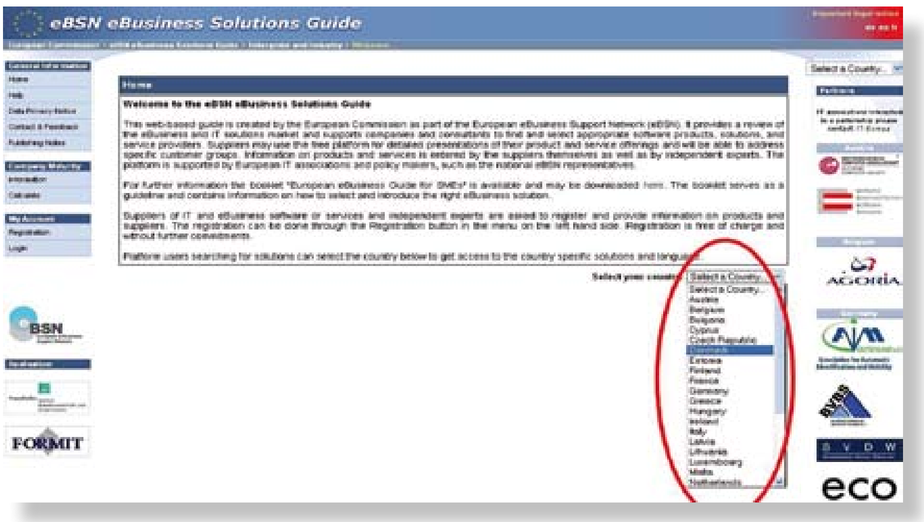
They have no specific technological competences and rely on the consultancy work of an independent IT company. The management explains all the firm's technological needs to the consultant and then requests the proposal of possible alternative solutions together with the related costs.

The IT consultancy company consistently uses the eBSN eBusiness Solutions Guide to check the new eBusiness product characteristics and their availability. The IT consultant's job is to design the entire information system of the enterprise with all the required office suite instruments, the security policy tools and a broadband internet access.

The consultant will then present 3 different proposals. The first proposal relies on open source and free license software; this way, the consultant estimates lower marginal profits on the products but a constant future return on the consultant activity. The other 2 solutions that he plans to submit to the board of directors are based on commercial licences and obviously result in greater expense.

For the solutions based on commercial licences, the consultant has a clear idea of the products he is looking for. From the home page of the eBSN eBusiness Solutions Guide, he first selects Denmark and one step later he selects the United Kingdom as the country of origin. The reason he does this is because the search results show all the products commercialised by the IT providers who have inserted information in the eBSN eBusiness Solutions Guide in the countries they cover. The consultant knows that the UK eBusiness market is more developed than the Danish one and that, generally speaking, there are more products with reduced prices (Figure 5-5).

Figure 5-5 - eBSN eBusiness Solutions Guide home page



After selecting Denmark as the country of origin, he is redirected to the detailed search page. On the left hand side of the page, he enters in the “search field” the name of the producer and the name of the IT solution (Figure 5-6).

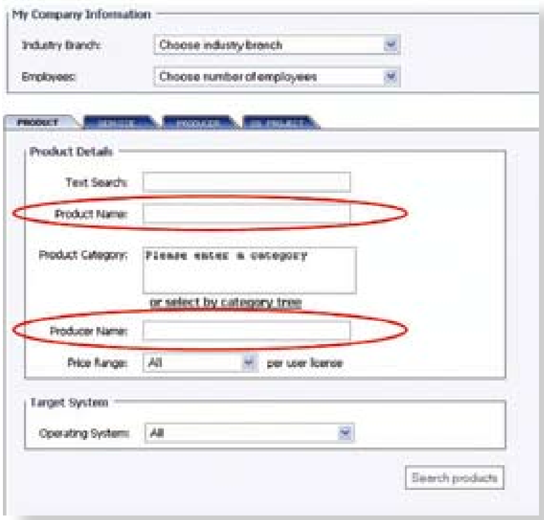



Figure 5-6 - eBSN eBusiness Solutions Guide search page

The possible search results are:

- No available solutions. In Denmark, the ICT providers who have entered data on their supply do not commercialise the required product.
- One solution. One of the ICT providers operating in the Danish eBusiness market sells the product.
- More than one solution. Many providers offer the required product, In this case, the consultant can choose amongst the various versions and on the basis of any former commercial relationships with the listed providers.

Even if the eBusiness product is available in Denmark, the consultant can check the availability in the UK market and evaluate the advantages of buying it in a different country (taking into account the exchange rate and the delivery fee). He could do this by selecting United Kingdom as country of origin in the start page (Figure 5-5).

As far as the open source and free software is concerned, the product is mostly free of charge but could require customisations. In this case, the consultant is not looking directly for the eBusiness solutions. He is assessing the potential competitors in the Danish market who may be capable of providing consultancy services for the customisation of the eBusiness solutions. He can do this by using the detailed search for services.

# 6. Analysis of the preliminary supplier data of the eBSN eBusiness Solutions Guide

## 6.1 Acquisition criteria for eBusiness solutions

Software producers, distributors and others can fill the eBSN eBusiness Solutions Guide database themselves to promote their eBusiness offers. Fraunhofer IAO and FORMIT used two approaches to contact the solution providers:

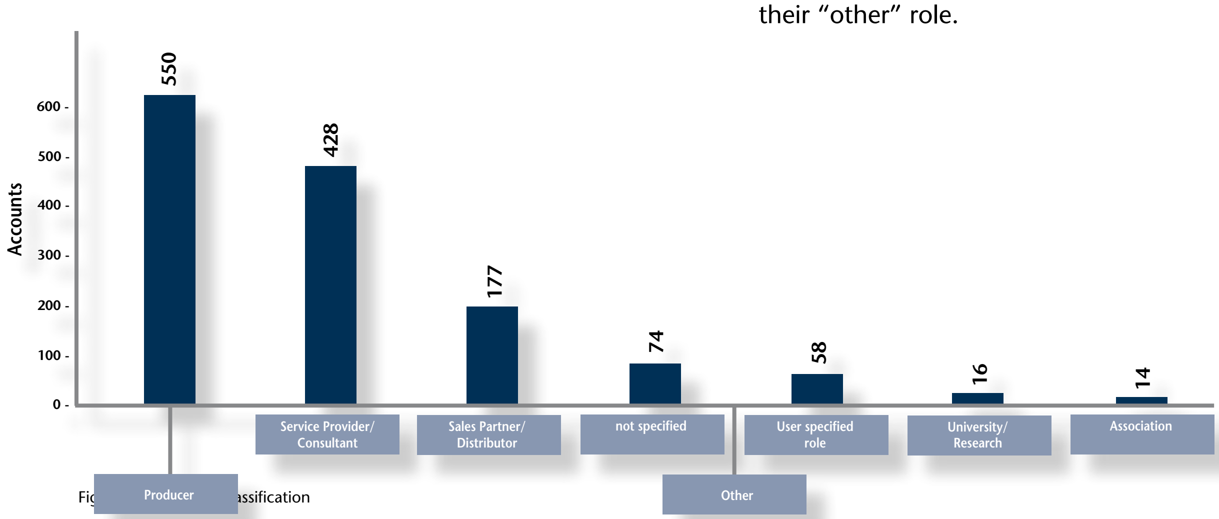
A top-down approach:  contacting the most important national IT associations across the European Union to promote the initiative among their members. Several associations informed their members about the project and became a partner by adding their logo to the eBSN eBusiness Solutions Guide. The acquisition of further associations will continue after the publication of this report.

A bottom-up approach: contacting directly more than 11,000 European ICT suppliers and asking them to insert their eBusiness offers, especially for SMEs, in the eBSN eBusiness Solutions Guide.

The data for this chapter and annex C were collected between July and October 2007 in a preliminary version of the eBSN eBusiness Solutions Guide. During this time, 1122 users registered to the platform. Data on 774 eBusiness producers and 1128 products were entered into the tool. (see annex C for the list of eBusiness suppliers).

## 6.2 Data and statistics on the eBusiness suppliers

To register on the eBSN eBusiness Solutions Guide, users had to specify their role (multiple selections were possible) – if they are a producer or an "other" (a service provider/consultant, sales partner/distributor, university/research or an association). Chapter 4.3 sets out the differences between these user roles. Figure 6-1 shows which roles the users have selected: 550 (49% of the 1122 users) are producers, 428 (38%) are service providers or consultants, 177 (16%) are sales partners or distributors, 16 (1%) are universities or research institutes, 14 (1%) are associations and 74 (7%) did not specify their "other" role.




Fi… assification

Figure 6-2 shows the origin of the producers entered. Please note that every user who is registered as "other" can add as many producers to the system as he want. For this reason, many more producers are entered than registered producer accounts (shown in figure 6-1). 549 producers out of the overall 774 (71%) are from Germany.

The reason for this could be that Fraunhofer IAO made the eBSN eBusiness Solutions Guide public and is better known to German firms. 87 producers (11%) have no country-specific data. This means that these are Open Source projects and have no country to which they belong. The other ranked countries can be seen in figure 6-2.

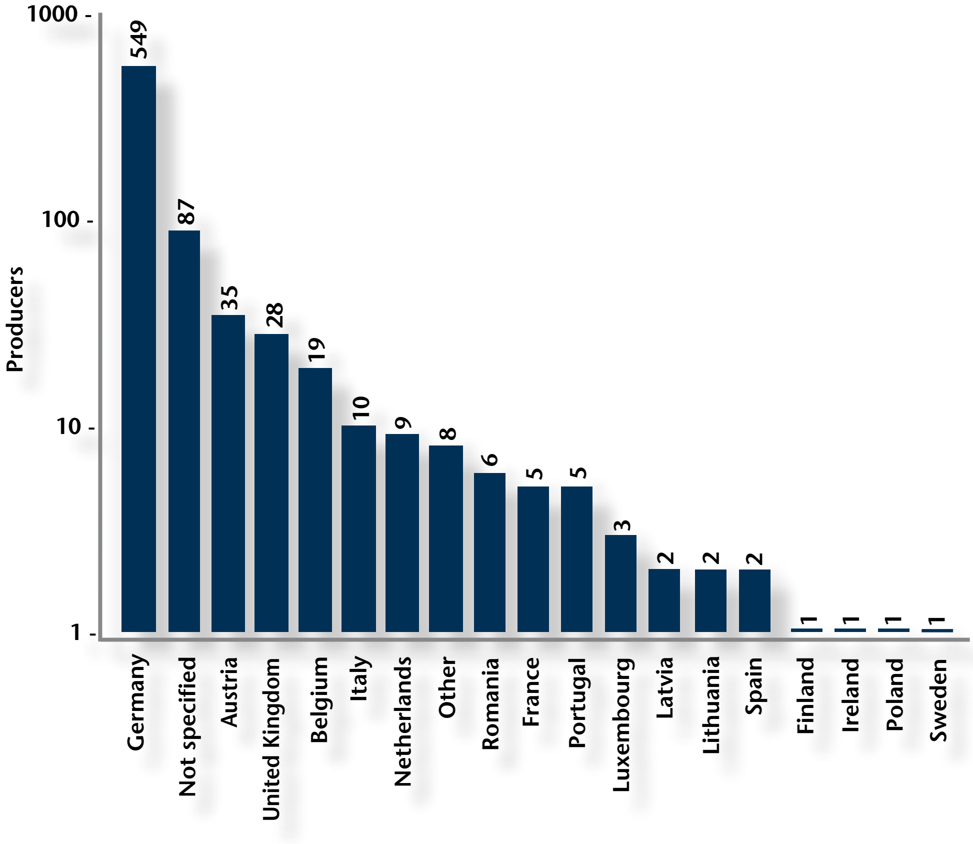



Figure 6-2 Producer per country

## 6.3 Data and statistics on the eBusiness solutions

The licensing and use model for the 1128 registered products is shown in figure 6-3 (multiple selections were possible). 736 of the 1128 products (65%) are commercial. 175 products (15%) are available from Application Service Providers and 103 (9%) have an Open Source license.

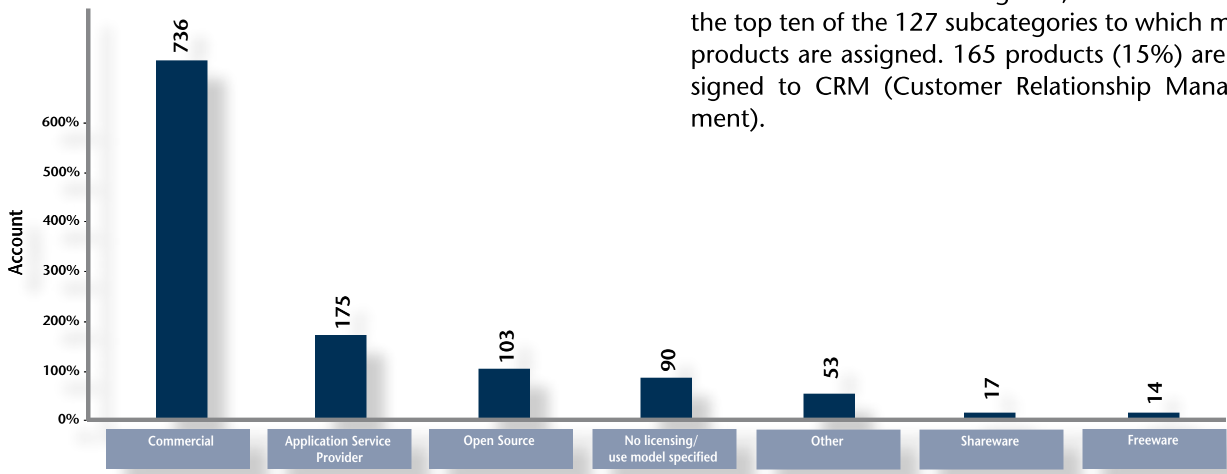



Figure 6-3 Product licensing

In the scope of the product classification (see the complete classification in annex B) there are nine main categories. Figure 6-4 shows how the 1128 products are assigned to the categories (multiple selections were possible). 1082 products (96%) belong to the category "Information Management and Technology". The category "Research and Development, Engineering" is the smallest with 174 products (15%).

In the context of the categories, table 6-1 shows the top ten of the 127 subcategories to which most products are assigned. 165 products (15%) are assigned to CRM (Customer Relationship Management).

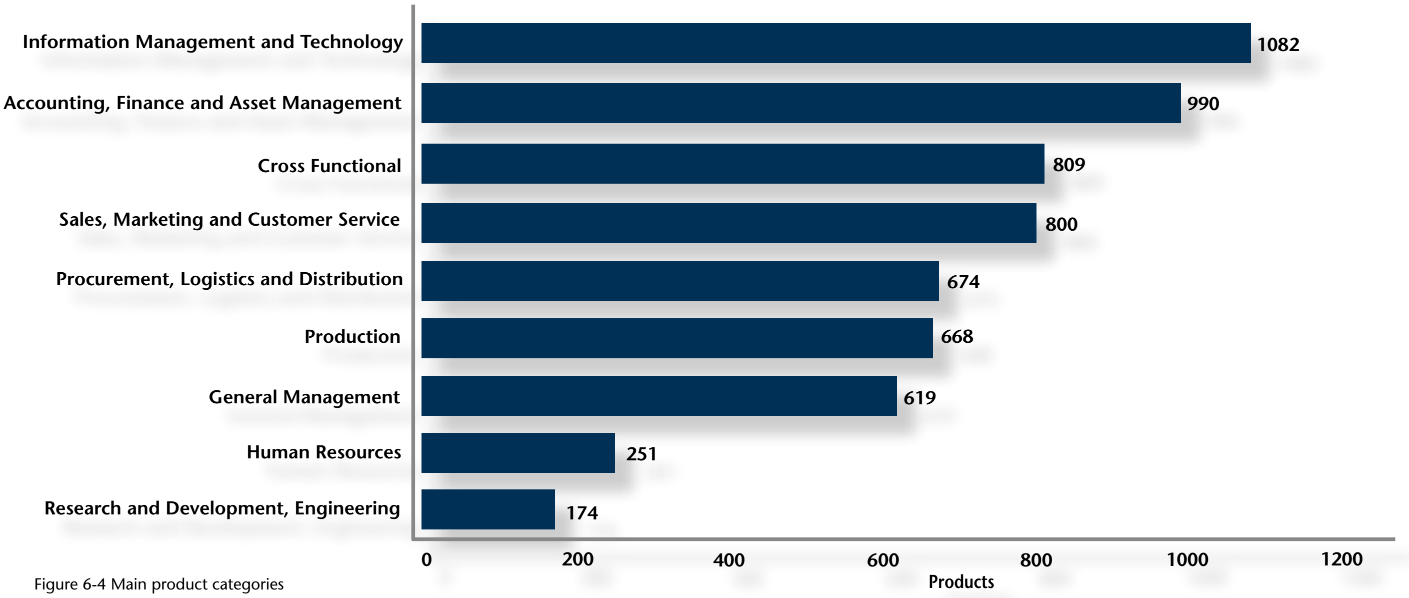



Figure 6-4 Main product categories

| Subcategory | Main category | |
|---|---|---|
| 1. Customer Relationship Management | Sales, Marketing and Customer Service | 165 |
| 2. Reporting | Accounting, Finance and Asset Management | 151 |
| 3. Controlling | Accounting, Finance and Asset Management | 128 |
| 4. Billing and Invoicing | Accounting, Finance and Asset Management | 122 |
| 5. Order Management | Sales, Marketing and Customer Service | 110 |
| 6. Document and Workflow Management | Cross Functional | 107 |
| 7. Product and Services Management | Sales, Marketing and Customer Service | 101 |
| 8. Advanced Planning and Scheduling | Production | 99 |
| 9. Enterprise Resource Planning Systems | General Management | 98 |
| 10. Capacity Planning | Production | 96 |

Table 6-1 Top ten subcategories with number of products

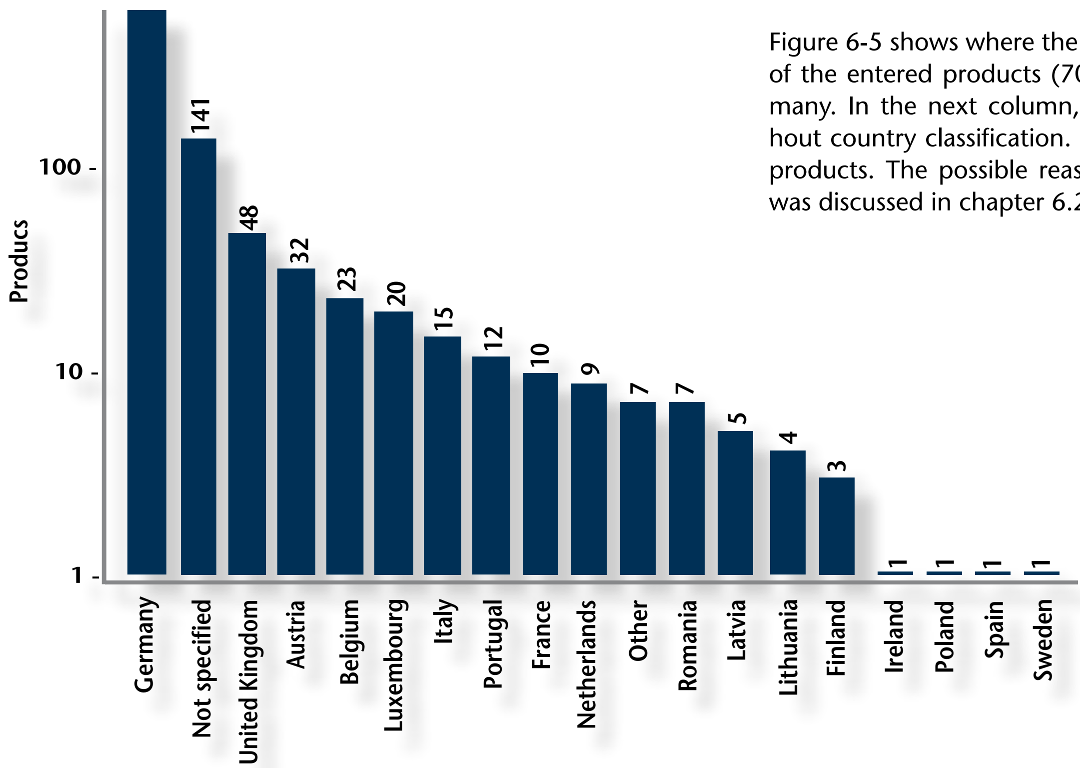



Figure 6-5 Products per country

Figure 6-5 shows where the products are from. 788 of the entered products (70%) are offered in Germany. In the next column, 141 products are without country classification. These are Open Source products. The possible reason for this distribution was discussed in chapter 6.2 (see figure 6-2).

# 6.

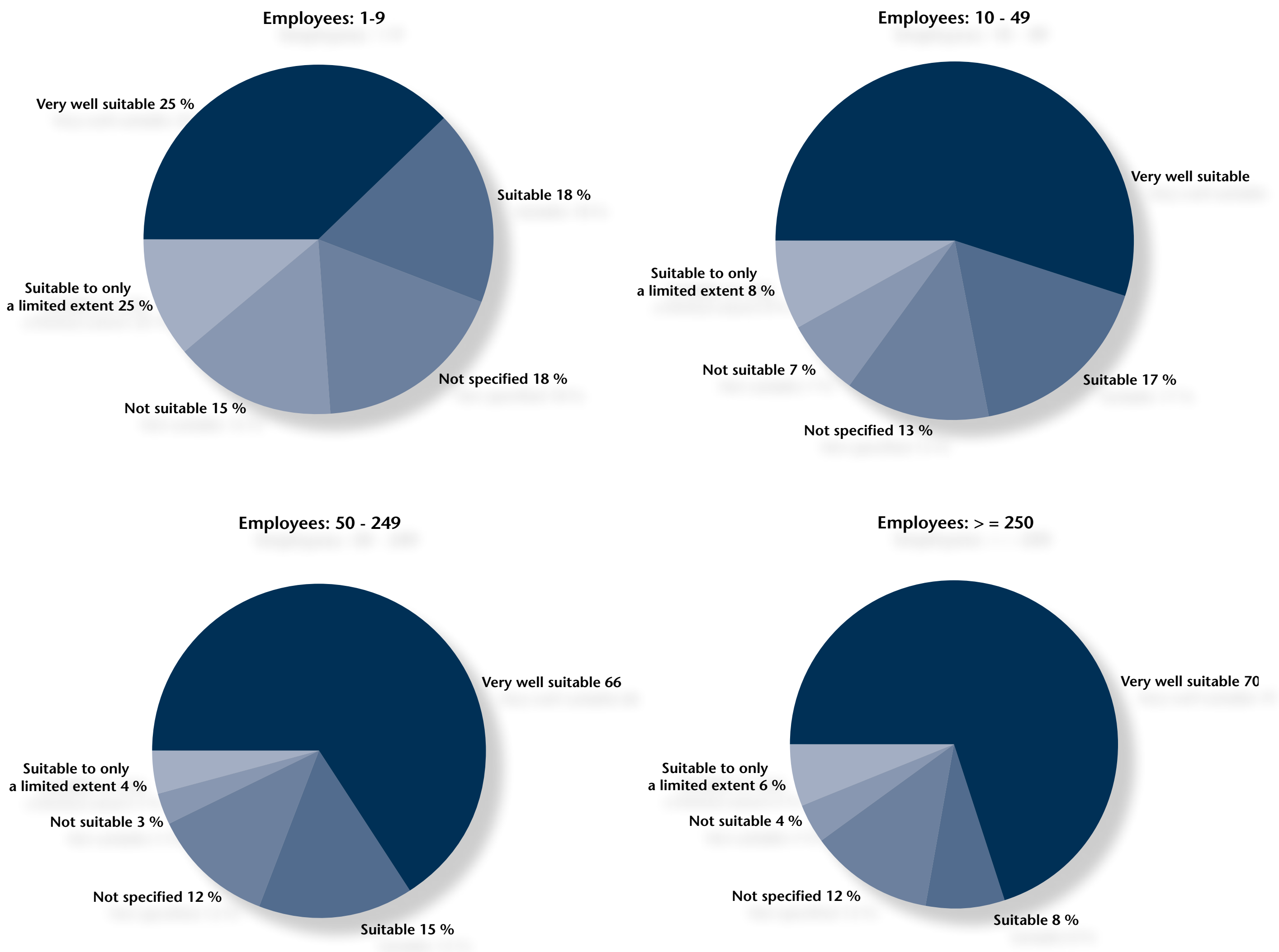



Figure 6-6 Suitability of products classified by firm size

Figure 6-6 shows the suitability of the products for the different sizes of firms. 70% of the products are very well suitable for a firm size of 250 or more employees. For firms with a size of 10 – 49 and 50 – 249 employees, the suitability is also very good (55% and 66%).

There are nine service categories from which the 774 producers could choose. Multiple selections were possible, resulting in a total of 2086 services (see figure 6-7). 380 producers (49%) offer consulting services. Communication services are the least offered services with 85 producers (10%).

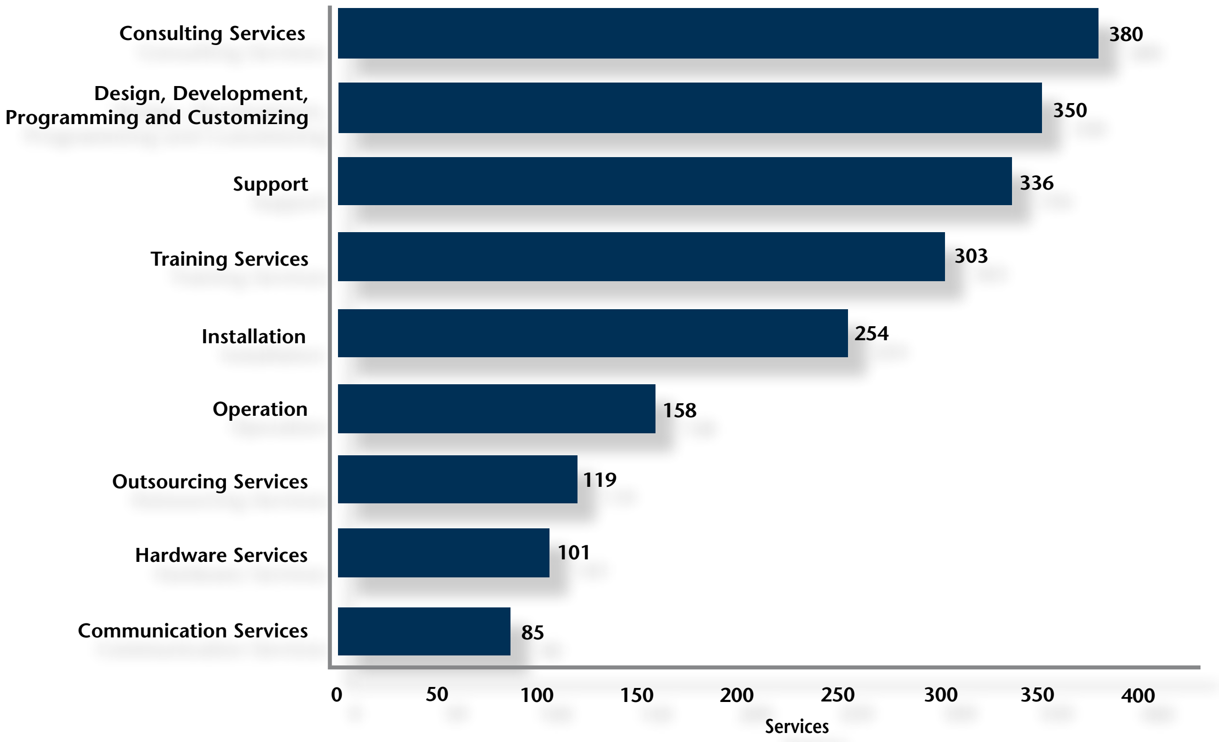



Figure 6-7 Main service categories

# 6.

# eBusiness Guide for SMEs

# Annex A: References

Annex A: References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- eBusiness W@tch (2004), "The European eBusiness Report: A portrait of eBusiness in 10 sectors of the EU economy" 2004 edition, 3rd Synthesis Report of the eBusiness W@tch, http://www.eBusiness-watch.org/key_reports/documents/EBR04.pdf
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Technology Observatory and of the European Economic Interest Grouping, printed version.

- EITO (2007), "*European Information Technology Observatory 2007*", fifteenth edition of the annual book of the European Information Technology Observatory and of the European Economic Interest Grouping, printed version.

# Annex B: Product classification

## Annex B: Product classification with mapping to functional areas and business processes

The table provides a classification based on product classes, which are mapped to functional areas and business processes (see chapter 4.4).

| Functional Area | Business Process | Product Class |
|---|---|---|
| **General Management** | | |
| | General Management | |
| | | Corporate Planning |
| | | Enterprise Resource Planning Systems |
| | Business Intelligence | |
| | | Business Planning |
| | | Business Process Automation |
| | | Decision Support Systems |
| | | Enterprise Performance Management / Executive Information Systems (EIS) |
| | Project Management | |
| | | Project Management Solutions |
| | | Professional Services Automation |
| | | Project Accounting |
| **Sales, Marketing and Customer Service** | | |
| | Sales and Marketing | |
| | | Enterprise Marketing Automation |
| | | Market Research |
| | | Online Shops |
| | | Order Management |
| | | Customer Relationship Management (CRM) |
| | Customer Service | |
| | | Call Center Management |
| | | Help Desk Management |
| | | Online Customer Support |
| | | Service Organisation Management |
| | Sales Logistics | |
| | | Product and Services Management |

# Annex B

| Functional Area | Business Process | Product Class |
|---|---|---|
| **Research and Development, Engineering** | | |
| | Scientific Analysis & Simulation | |
| | | Mathematics |
| | | Statistics |
| | | Natural Sciences |
| | | Simulation |
| | Product Design and Engineering | |
| | | CAD |
| | | CAM |
| | | CAE |
| **Production** | | |
| | Production Planning & Control | |
| | | Advanced Planning and Scheduling |
| | | Capacity Planning |
| | | Engineer to Order/Make to Order |
| | | Factory Automation |
| | | Manufacturing Execution Systems |
| | | Process Control |
| | | Product Data Management |
| | | Product Life Cycle Management |
| | | Quality Control |
| **Procurement, Logistics and Distribution** | | |
| | Logistics and Procurement | |
| | | Product and Services Procurement |
| | | Requisitioning |
| | | Spend Management |
| | | Supply Chain Execution and Management |
| | | Transportation Management |
| | | Supplier Relationship Management (SRM) |
| | | E-Tendering |
| | | Procurement Marketplaces or Portals |
| | Distribution and Warehousing | |
| | | Barcoding Solutions |
| | | Fleet Management |

# Annex B

| Functional Area | Business Process | Product Class |
|---|---|---|
| | | Freight Management |
| | | RFID |
| | | Inventory Management |
| **Information Management and Information Technology** | | |
| | Software and Web Development | |
| | | Planning and Implementation Tools |
| | | Debugging, Testing and Analysis |
| | | Integrated Development Environments (IDE) |
| | | Website Design and Development |
| | | Programming Languages |
| | | CASE |
| | Security | |
| | | Access Control/User Management |
| | | Encryption and Key Management |
| | | Intrusion Detection and Prevention |
| | | Security Monitoring |
| | | Data Cleansing and Data Scrubbing |
| | Server Infrastructure | |
| | | Application Servers |
| | | E-mail Servers |
| | | Internet Servers |
| | Enterprise Systems Management | |
| | | Performance Management |
| | | Backup Systems |
| | | Disaster Recovery |
| | | Network Management |
| | | Remote Administration |
| | | Local Area Network (LAN) |
| | | Virtual Private Network (VPN) |
| | | Extranet and Intranet |
| | | Mobile Computing |
| | | Software Configuration Management |
| | | Storage Solutions |
| | | Service Oriented Architectures (SOA) |
| | | Systems Integration |



| Functional Area | Business Process | Product Class |
|---|---|---|
| | Database Infrastucture | |
| | | Database Systems |
| | | Database Administration |
| | | Report Generators |
| | Enterprise Portals | |
| | | Enterprise and Employee Portals |
| **Human Resources** | | |
| | Human Resource Management | |
| | | Recruitment |
| | | Skills Management |
| | | Resource Planning and Scheduling |
| | | Time Reporting |
| | | Benefits Administration |
| | | Employee Appraisal Solutions |
| | | Personnel Administration and Workforce Management |
| | Business Education and Training | |
| | | Computer Based Training (CBT) |
| | | Web Based Training (WBT) |
| **Accounting, Finance and Asset Management** | | |
| | Accounting and Finance | |
| | | Accounts Receivable / Accounts Payable |
| | | Billing and Invoicing |
| | | Fixed Asset Management |
| | | Payroll and Personnel Accounting |
| | | Portfolio and Investment Management |
| | | Treasury/Cash/Risk Management |
| | | Tax Payment |
| | Assets and Facility Management | |
| | | Enterprise Asset Management (EAM) |
| | | Equipped Maintenance |
| | | Facilities Management |
| | | Field Service Management |
| | | Materials Compliance Management |
| | | Parts Management |
| | Controlling and Reporting | |
| | | Budgeting |
| | | Controlling |
| | | Reporting |

# Annex B

| Functional Area | Business Process | Product Class |
|---|---|---|
| | | Balanced Scorecard |
| **Cross Functional** | | |
| | Office Productivity | |
| | | Presentation |
| | | Spreadsheet |
| | | Text Processing |
| | | Office Suites |
| | | Productivity Tools |
| | Knowledge Management | |
| | | Document and Workflow Management |
| | | Enterprise Content Management |
| | | Information Life Cycle Management |
| | | Knowledge Base Management |
| | Communication & Groupware | |
| | | Personal Information Management (PIM) |
| | | Collaborative Tools |
| | | E-mail |
| | | Group Calendars |
| | | Messaging Solutions |
| | | Teleconferencing, Audioconferencing |
| | | Community Platforms |
| | Graphics | |
| | | 3D Modelling and Rendering |
| | | Picture Editors |
| | | Picture Viewers |
| | Video | |
| | | Video Capture |
| | | Video Editing |
| | | Video Playback |
| | Audio | |
| | | Audio Capture |
| | | Audio Playback |
| | | Audio Editors |
| | | Speech Processing |

# Annex C: List of eBusiness Suppliers

Annex C: List of E-Business Suppliers

## Austria

**AKtiv ONline GmbH** (Steyr) *www.aktivonline.at*
*Products:* CRM_Web

**AMEPHEAS** (Wien) *+43 1486 49 1000*
*Products:* AMEPHEAS

**BEKO Engineering & Informatik AG** (Nöhagen) *www.beko.at*

**BestSolution.at EDV Systemhaus GmbH** (Innsbruck) *www.BestSolution.at*
*Products:* MACBeS, BiSCAT Basic, BiSCAT Social

**BiCA (Austria) GmbH** (Vienna) *www.WHATaPOS.com*

**Business-Imaging Solutions & Services GmbH** (Wolkersdorf im Weinviertel) *www.biss.at*

**CISC Semiconductor** (Klagenfurt) *www.cisc.at*
*Products:* CISC RFID MeETS, CISC RFID ASD Kit+Library, SyAD System Architect Designer

**Developer AT GmbH.** (Wien) *www.developer.at*
*Products:* TYPO3

**dynaTrace software GmbH** (Linz) *www.dynatrace.com*
*Products:* dynaTrace Diagnostics

**easyklick Internet Handels GmbH** (Vösendorf) *www.easyklick.com*
*Products:* easyklick

**EASYTOUCH R.Divoky KG** (Vienna) *easytouch.at*

**Fabasoft Austria GmbH** (Linz) *www.fabasoft.at*
*Products:* Fabasoft eGov-Suite

**Fabasoft Distribution GmbH** (Linz) *www.fabasoft.com*
*Products:* Fabasoft DUCX 2007, Fabasoft Folio 2007, Fabasoft Operations Manager 2007

**IDENTEC SOLUTIONS AG** (Lustenau) *www.identecsolutions.com*
*Products:* ILR GPS TAG

**Industrie Informatik GmbH** (Linz) *www.industrieinformatik.com*
*Products:* cronetwork

**inet-logistics GmbH** (Wolfurt) *www.inet-logistics.com*
*Products:* Transportation Management

**INVARIS Informationssysteme GmbH** (Eisenstadt) *www.invaris.com*
*Products:* DLA-2000®

**Iplexx IT Solutions KG** (Innsbruck) *www.iplexx.at*

**IT-eXperience** (Wien) *www.it-experience.at*

**KAPPER NETWORK-COMMUNICATIONS GmbH** (Vienna) *kapper.net*

**KINAMU Business Solutions AG** (Schwechat) *www.kinamu.com*

**LOGIM Software GmbH** (Wundschuh) *www.KNAPP.com/Logim*

**MB Informationsdesign** (Dornbirn) *www.buzinkay.net*

**Medexter Healthcare GmbH** (Vienna) *www.medexter.com*
*Products:* Thyrexpert/Interpretation, Toxopert/Interpretation, RheumaDiff/Diagnosis, Moni/Surveillance-ICU, Arden, Teleiatros, Hepaxpert/Interpretation

**MES-Consulting** (Nussdorf) *www.MES-Consult.com*

**MESONIC Business Software** (Mauerbach) *www.mesonic.com*

**Mindbreeze Software GmbH** (Linz) *www.mindbreeze.com*
*Products:* Mindbreeze Enterprise Search

**Onepoint Software GmbH** (Graz) *www.onepoint.at*
*Products:* Onepoint Project

**Parsgroup Informationstechnologie GmbH** (Wien) *www.parsgroup.at*
*Products:* Parsgroup Service Platform (PGSP), www.relopia.com

**ProWeDa.biz** (Innsbruck) *proweda.biz*

**Software Hemmelmayr** (Eferding) *www.softwarehemmelmayr.at*
*Products:* BüroWARE, PLANKOCH

**Systema Human Information Systems GmbH** (Steyr) *www.systema.info*

**VRZ Informatik GmbH** (Dornbirn) *www.vrz.net*

**WAVE Solutions Information Technology GmbH** (Vienna) *www.wave-solutions.com*

**Webges** (Vienna) *www.webges.com*

## Belgium

**Alfa POS Services** (Merksem) *www.alfapos.eu*
*Products:* unTill, IONX Camera software, GPS-Buddy

**AS-Concept** (LES ISNES) *www.as-concept.com*
*Products:* Accounting System (AS-Concept), Time System, K-Account, Blue Seed

**Aventiv** (Sint-Martens-Latem) *www.aventiv.com*
*Products:* NomaDesk

**Babelgom** (Louvain-la-Neuve) *www.babelgom.com*
*Products:* Babelgom

**BHA** (Brüssel) *www.bh-a.com*
*Products:* BeCreative , Contacts&Events

**BIT IT Consultancy** (Westerlo) *www.bitconsult.be*


**Cherokee Europe sca** (Wavre) *www.cherokeepwr.com*

**defimedia SA** (Gembloux) *www.defimedia.be*
*Products:* AToms

**EnergyICT** (Kortrijk) *www.energyict.com*
*Products:* EpIO, ExIO Galvanic Barrier, RTU+Server, WebRTU Z2, RTU+V6, EIWebModem

**ERES nv** (Kortrijk) *www.eres.be*

**gdi sprl** (Ougree) *www.gdi-soft.com*
*Products:* Guardian

**Level IT** (Angleur) *www.level-it.be*
*Products:* REGETOX PRO, E-TPM

**Ludika Studio** (Liège) *www.ludika.com*

**MESware NV** (Roeselare) *www.mesware.be*
*Products:* MEScontrol.net

**MI4C** (Merelbeke) *www.mi4c.be*
*Products:* CTArchitect

**Somicta** (Wavre) *www.somicta.be*

**SWAC International** (Oostende) *www.swacinternational.com*

**TRILOGY** (Brussels) *www.trilogy.be*

**VisionWare** (Deerlijk) *www.visionware.be*

## Finland

**Elektrobit, EB** (Oulunsalo) *www.elektrobit.com*
*Products:* EB WLAN Node DT30, EB Identification Network Architecture, EB RFID Reader URP1000-ETSI

## France

**BELHARRA SAS** (BASSUSSARRY) *www.belharra.fr*
*Products:* e-SCM.com

**Business Objects SA** (Levallois-Perret Cedex) *www.businessobjects.com*
*Products:* Crystal Reports XI Professional

**Dexxon** (Gennevilliers) *www.dexxon.com*
*Products:* Storage disks, Print supplies, Print equipment, Flash memory, Storage tapes

**husson ingénierie** (Perigueux) *www.husson-info.fr*
*Products:* Solution TCX SaaS

**Microsoft** (Paris La Defense) *www.microsoft*
*Products:* Microsoft Dynamics AX, Microsoft Dynamics - Point of Sale

# Annex C

## Germany

**]init[ AG** (Berlin) *www.init.de*

**1eEurope Deutschland GmbH** (Holzgerlingen) *www.1eeurope.de*

**247 Systems GmbH** (Frankfurt am Main) *www.247systems.de*
*Products:* 247 Character, 247 Helper, 247 Teaser

**2i Industrial Informatics GmbH** (Freiburg) *www.2igmbh.de*

**a.u.b.köln e.K.** (Köln) *www.aubkoeln.de*
*Products:* Redisys

**A2C Software AG** (Aachen) *www.a2c.de*
*Products:* ePriceAnalyzer

**a3 systems GmbH** (Saarbruecken) *www.a3systems.com*
*Products:* dante

**ABAS Software AG** (Karlsruhe) *www.abas.de*
*Products:* ABAS Business Software

**abaXX Technology AG** (Stuttgart) *www.abaXX.de*

**Abfallmanagement Datenverarbeitungs Aktiengesellschaft** (Recklinghausen)
*www.abfallmanagement.de, www.waste-notification.com, www.zedal.de*

**ABRACON Gmbh** (Bonn) *www.abracon.de*

**abylonsoft** (Seibersbach) *www.abylonsoft.de*
*Products:* abylon SHREDDER, abylon ENTERPRISE, abylon SHAREDDRIVE, abylon CRYPTDRIVE, abylon CRYPTMAIL, abylon LOGON, abylon BASIC

**Achtziger Business & Security** (Hamburg) *www.abusec.com*

**aconso AG** (Munich) *www.aconso.com*
*Products:* aconso Digital Personnel Folder

**ACOS GmbH** (Unterfoehring) *www.acos.com*
*Products:* ACOS PLUS.1

**ad-fontes GmbH & Co. KG** (Illingen) *www.mycop.de*
*Products:* COP Compare & Procure, COP-OS Online Services

**advofakt GmbH & Co.KG** (Baden-Baden) *www.advofakt.de*
*Products:* advofakt

**AEG Identifikationssysteme GmbH** (Ulm) *www.aegid.de*

**aerial-survey-base** (Bad Homburg) *www.aerial-survey-base.com*
*Products:* aerial survey

**AFI-P.M.Belz Agentur für Informatik GmbH** (Stuttgart) *www.afi-stuttgart.de*
*Products:* AFI P.M.Belz Agentur für Informatik GmbH

**aformatik Training & Consulting GmbH & Co. KG** (Sindelfingen) *www.aformatik.de*
*Products:* comeleo sales

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**AFUSOFT Kommunikationstechnik GmbH** (Koenigsbach-Stein) *www.afusoft.com*
*Products:* AFUSOFT Security.WEB

**aibis Informationssystem GmbH** (Hamburg) *www.aibis.de*
*Products:* SkaiForms

**AKSL AG** (Frankfurt) *www.aksl.de*
*Products:* sIQnum

**Alevion Unternehmensberatung** (Kiedrich) *www.alevion.com*

**Alzinger & Vogel Softwareentwicklungs GmbH** (Hohenfels) *www.alzinger-vogel.de*
*Products:* Woodpecker Issue Tracker

**Ameris Systeme GmbH** (Essen) *www.ameris.de*

**Ammon MOA-Software** (Schwelm) *www.moa-soft.de*
*Products:* AMMON Immobilienmakler Software

**Amt24 e.V.** (Berlin) *www.amt24.de*

**Andreas Gratz Software Solutions** (Floh-Seligenthal) *www.agss-online.de*

**AP Vertrieb - Warenwirtschaft, Kassensoftware, Auftragsbearbeitung, Lagerverwaltung, Onlineshop** (Eurasburg) *www.acts2000.com*
*Products:* Multi-System 2007 - Warenwirtschaft, Kassensoftware, Auftragsbearbeitung, Lagerverwaltung,Onlineshop

**apical art webdesign** (Linnich) *www.apicalart.de*

**aqcon gmbh** (Backnang) *www.aqcon.com*

**Aradion IT-Consulting & Services** (Hannover) *aradion.de*

**Arcad Systemhaus** (Haltern am See) *www.arcad.de*
*Products:* ARCAD 3D CAD

**argumentum GmbH** (Hoehenkirchen-Siegertsbrunn) *www.argumentum.de*

**arlanis Software AG** (Potsdam) *www.arlanis.com*
*Products:* arlanis Salesforce.com Data Exchange, arlanis Universal Data Converter

**asapSoftware GmbH** (München) *www.asapSoftware.de*
*Products:* asapTranslate, asapMail, asapDesigner, asapTesy

**Assion Electronic GmbH** (Niederkassel) *www.assion.eu*
*Products:* ULM - A system for environment logistic management!, Mobile laser marking system - For the easy inscription of large parts!, JULIA² - A new way of taking inventory and archiving!, Gate access control system!, WODAbau - Tool & equipment management system for the construction industry!

**ATech-Consulting** (Stuttgart) *www.ATech-Consulting.com*
*Products:* P11 - Namechecking, P_REX_fd_fraudDetection, ATech-Webshop, P:SECCO, P111 - Medical Research , P51 - Marketing and Sales Control, P.SECCO Namechecking, P_REX_cr_CreditRating, P_CORD, P21 - Business Monitoring, P31 - Credit Rating, P210 - Anti Money Launde

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**Atempo Deutschland GmbH** (Stuttgart) *www.atempo.com*
*Products:* Atempo Time Navigator, Atempo LiveBackup

**AW-Systems** (Wolfenbuettel) *www.aw-systems.net*

**Axinom GmbH** (Fuerth) *www.axinom.de*
*Products:* AxCMS.net

**B&IT Solutions** (Berlin) *+49 30 8867 6099*
*Products:* iperi.fact

**B.O.S. Software Service und Vertrieb GmbH** (Haar bei München) *www.bossoftware.de*
*Products:* tcVISION, tcACCESS

**BARCODAT GmbH** (Dornstetten) *www.barcodat.de*

**Bardenheuer GmbH** (München) *www.bardenheuer.de*
*Products:* Software Development and Consulting

**basework GmbH** (Osnabrück) *www.basework.de*
*Products:* BCM

**BasWare GmbH** (München) *www.basware.de*
*Products:* BasWare Enterprise Purchase to Pay

**Batix Software GmbH** (Saalfeld) *www.batix.com*
*Products:* Batix Content Management System

**Bau-Software-Haus Veit Christoph GmbH** (Fellbach) *www.bautext.com*
*Products:* Bautext

**BeagleSoft GmbH** (Berlin) *www.beaglesoft.de*

**BeamYourScreen GmbH** (Mannheim) *www.BeamYourScreen.com*

**BECAUSE SOFTWARE AG** (Germering) *www.because-software.com*
*Products:* easyJOB.net

**BECHMANN + Partner GmbH** (Augsburg) *www.bechmann-software.de*
*Products:* AVAscript , easyKALK

**Bertels + Hirsch GbR** (Paderborn) *www.bertels-hirsch.de/*
*Products:* Winfonie mobile

**bfz gGmbH - PM eLearning & neue medien** (Nuernberg) *www.bfzonline.de*
*Products:* Fernlehrgang "Projektmanagement"

**BFZ GmbH** (Böbingen) *bfz-schuster.de*
*Products:* CIMOS ERP

**Bissantz & Company GmbH** (Nuernberg) *www.bissantz.de/*
*Products:* DeltaMaster

**Blauhut & Partner Informationssysteme GmbH** (Egling) *www.procos.de*
*Products:* ProCoS

**BookArts and more... Buchbinderei Decker** (Sinzig) *www.hcts-net.com/*

**BPS Software GmbH & Co.KG** (Ibbenbren) *www.bps-software.de*
*Products:* BPS Bau

**brainbits GmbH** (Köln) *www.brainbits.net*

**BRainTool Software GmbH** (Boennigheim) *www.braintool.com*
*Products:* A-Plan

**BREDEX GmbH** (Braunschweig) *www.bredex.de*
*Products:* GUIdancer

**Bremion GmbH** (Bremen) *www.bremion.de*
*Products:* AssistAccount, AboCheck

**Brooks Automation (Germany) GmbH** (Mistelgau) *www.brooks-rfid.com*

**Brückner aktuelle Bürosysteme GmbH** (Pinneberg) *www.brueckner-gmbh.de*
*Products:* Auftragsbearbeitung für Windows WinAB2000, TeamBoard

**Business Linux Hanse Network** (Hamburg) *www.free-it.org/*

**businessMart AG** (Stuttgart) *www.businessmart.de*
*Products:* dataStudio, SISTOMart, procureMart, connectMart, sellMart, dataMart, Virtual Commerce

**BVBS-Bundesverband Bausoftware e.V.** (Weissach) *www.bvbs.de*

**C/S-Solutions GmbH** (Pforzheim) *www.cssol.de*

**CAD Schroer GmbH** (Moers) *www.cad-schroer.com*
*Products:* MPDS4, MEDUSA4, STHENO/PRO

**Caise GmbH** (Witten) *www.caise.de*

**camos Software und Beratung GmbH** (Stuttgart) *www.camos.de*
*Products:* camos.Configurator, camos.Selling

**camunda GmbH** (Bad Mergentheim) *www.camunda.com*

**CAS Software AG** (Karlsruhe) *www.cas.de*

**CATENIC AG** (Bad Tölz) *www.catenic.com*
*Products:* CATENIC Anafee (TM)

**cbs Corporate Business Solutions Unternehmensberatung GmbH** (Heidelberg)*www.cbs-consulting.com*
*Products:* cbs XI Industry Solution for GS1, cbs Industry Solutions for SAP NetWeaver XI

**Cedros Gesellschaft für Datenverarbeitung mbH** (Sankt Augustin) *www.cedros.com*
*Products:* c.-ICFD SIM Box Detection

**CFO SYSTEMS GmbH Zweigniederl. Emsdetten** (Emsdetten) *www.masterfinanz.com*
*Products:* MasterFINANZ(TM)

**chors GmbH** (Windhagen) *www.chors.com*
*Products:* s@m sales, s@m campaign

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**Cincom Systems GmbH & Co. oHG** (Schwalbach) *www.cincom.com*
*Products:* Cincom Synchrony, Cincom Smalltalk, Cincom Quote-to-Order, Cincom Document Solutions

**Class.Ing** (Borchen) *www.classing.de*
*Products:* Class.Edit, Class.Test, Class.View

**CoCoNet** (Erkrath) *www.coconet.de*
*Products:* MULTIVERSA GPF Generic Payment Factory, MULTIVERSA IBS International Banking Server, MULTIVERSA PBS Professional Banking System, MULTIVERSA IFP International Finance Portal

**CODA Financial Systems GmbH** (Essen) *www.coda.com/de*
*Products:* CODA-Financials, CODA-Intelligence, CODA-Control

**COI GmbH** (Herzogenaurach) *www.coi.de*
*Products:* COI-BusinessFlow 4X, COI-BusinessFlow Xtrend

**COMCO AG** (Dortmund) *www.comco.de*
*Products:* IntraPROTECTOR

**COMED Informationsmanagement GmbH** (Landsberg) *www.comed.de*

**COMELEO systems GmbH & Co. KG** (Ammerbuch) *www.comeleo.de*
*Products:* COMELEO info, COMELEO sales

**commercetools GmbH** (München) *www.commercetools.de*
*Products:* commercetools ON Demand GRID

**Communardo Software GmbH** (Dresden) *www.communardo.de*
*Products:* Communardo ProductivityNet 3.8, Communardo KnowledgeTopic Template for MOSS 2007

**Communication Lab Ulm** (Ulm) *www.comlab-ulm.de*
*Products:* Readability studies, Usability Studies, Eye-Tracking, Communication Analysis, Market Research

**COMPUS Computer GmbH** (Aschheim-Dornach) *www.compus.de*
*Products:* DATEV-interface for Microsoft Dynamics AX, DATEV-interface for RBS Factoring

**computerhansa Ges. f. Prozeß- u. Datentechnik mbH** (München)*www.computerhansa.com*

**Computer-L.A.N. GmbH** (Fulda) *www.computer-lan.de*

**ComSol AG** (Frechen) *www.comsol-ag.com*
*Products:* csWholesale, csFashion

**concept-computer Vertriebsgesellschaft mbH** (Bad Breisig) *www.concept-computer.de*
*Products:* ecomas (r) Extended Content Management System

**Conditio Gesellschaft fr individuelle Datenverarbeitung mbH** (Koeln) *www.conditio.de*

**CONET Solutions GmbH** (Hennef) *www.conet.de*
*Products:* CONET Marketing Suite, CONET Weaver Suite, CONET IP Phone Suite

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**Connect GmbH** (Mianz) *www.cnct.de*
*Products:* Switches, Load Balancer

**CONPLUS Mittelstandslösungen** (Mönchengladbach) *www.conplus.biz*
*Products:* SAP Business One

**Consubay** (Berlin) *www.consubay.com/*
*Products:* CombiFinances - Cameralistics, CombiFinances - Human Resources, CombiFinances - LPS, CombiFinances - CRM, CombiFinances - ERP Public Sector, Consubay's Advanced Controlling Solution for Microsoft Excel, CombiFinances - Report/BI, Consubay's e-learning pla

**CONTENS Software GmbH** (Munich) *www.contens.com*
*Products:* CONTENS relate, CONTENS 3.0 enterprise, CONTENS 3.0 professional, CONTENS 3.0 compact

**Controlware GmbH** (Dietzenbach) *www.controlware.de*
*Products:* Broadcasting, Network Video Solutions, Access & Optimization

**Corak Unternehmensberatung GmbH** (Freiburg) *www.corak.de*
*Products:* CORAK-Prozess, CORAK-ER, CORAK-BAB

**CoreMedia AG** (Hamburg) *www.coremedia.com*

**CORPIT GmbH** (Neuenstein) *www.corpit.de*
*Products:* CORPIT VS, CORPIT VS Collection, CORPIT SF, CORPIT VS Claims, CORPIT SA, CORPIT FL, CORPIT VU

**cosinex GmbH** (Bochum) *www.cosinex.de*
*Products:* eProcurement System, eTendering Platform, eCatalogue

**CP CORPORATE PLANNING AG** (Hamburg) *www.corporate-planning.com*
*Products:* CORPORATE PLANNER, CP-CONS

**credativ GmbH** (Mönchengladbach) *www.credativ.de*
*Products:* Open Source Support Center (OSSC)

**crm-now c/o im-netz GmbH** (Berlin) *www.crm-now.de*
*Products:* CRM on demand - crm-now/PG, on demand CRM - crm-now/PS

**crossbase mediasolution GmbH** (Böblingen) *www.crossbase.de*
*Products:* crossbase

**CSB-System AG** (Geilenkirchen) *www.csb-system.com*
*Products:* CSB-System

**CSS GmbH Dresden** (Dresden) *www.cssdresden.de*
*Products:* eGecko Control

**cyberpromote GmbH** (Schweitenkirchen) *www.cyberpromote.com*
*Products:* ForeCheck, Search Engine Glasses

**Cycos AG** (Alsdorf) *www.cycos.com*
*Products:* MultiMedia ContactCenter, mrs message routing system

**Daarwin Beratungsgesellschaft mbH** (Flensburg) *www.daarwin.de*

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**daenet GmbH** (Frankfurt) *www.daenet.eu*

**dahmen-net** (Stolberg) *www.dahmen-net.eu*

**Dakoda Software GmbH** (Paderborn) *www.dakoda.de*
*Products:* KOPIAS-SES

**Data Base System & Services GmbH** (Frankfurt / Main) *www.dbss.de*
*Products:* DBSSIP, TIAS

**DataFocus GmbH** (Köln / Cologne) *www.datafocus.de*
*Products:* Futrix

**DAVOnet GmbH** (Stadtallendorf) *www.davonet.de*

**DCA Computer GmbH** (Eberswalde) *www.dca-gmbh.de*

**DCC Computer Consulting GmbH** (Bremen) *www.dcc-bremen.de*

**DC-Software GmbH** (Muenchen) *www.dc-software.com*
*Products:* DC-Soil, DC-Foundation

**Decisio Unternehmensberatung GmbH** (Isernhagen) *www.decisio.de*
*Products:* RiskCity, ProjectCity

**DELTA BARTH Systemhaus GmbH** (Limbach-Oberfrohna) *www.debas.de*
*Products:* DELECO

**DELTA proveris AG** (Limbach-Oberfrohna) *www.depag.de*
*Products:* LEASMAN

**Deltaplan GmbH** (Leonberg) *www.deltaplan.de*
*Products:* Mietbus und Disposition, Fahrplan, Touristik mit Internetanbindung

**Dematic GmbH** (Offenbach) *www.dematic.com*

**DEMUS DATENSYSTEME GmbH** (Hannover) *www.demus.de*
*Products:* TRANSLATOR 300/PC

**Department of Logistics at Dortmund University** (Dortmund)*www.flog.mb.uni-dortmund.de*

**Derdack GmbH** (Potsdam) *www.derdack.com*
*Products:* message master® xsp, message master® Enterprise Alert 2007

**deset ltd** (Stuttgart) *www.deset.de*

**DevWare GmbH** (Wuppertal) *www.DevWare.de*

**dexxon data media and storage gmbh** (Mainz-Kastel) *www.dexxon.com*
*Products:* Storage Disks, Storage Tapes, Flash Memory, Print supplies

**DI Durban Informatik GmbH** (Karlsruhe) *www.di-ka.de*
*Products:* dikis, Framework Studio

**Digital River GmbH** (Köln) *www.digitalriver.com*
*Products:* e-commerce and e-marketing solutions

**digitmbh.com** (Griesheim) *www.digitmbh.com*
*Products:* digit BIS, digit Frango Reporting, digit IACTA 5, digit Importer2.NET, digit Planalyzer, SAP Connectivity

**Distler Company GmbH** (Waldkraiburg) *www.distler.com*
*Products:* Social Health Care (SHC)

**D-Link Central Europe** (Eschborn) *www.dlink.de*

**Dorel Verlags GmbH & Co. KG** (Berlin) *www.adhwise.de*
*Products:* adhwise professional, adhwise basic

**Dr. Berberich GmbH** (Langgoens) *www.dr-berberich.de*
*Products:* SECNOLOGY Universal Log Analyzer

**Dr. Staedtler Transport Consulting GmbH & Co. KG** (Nuernberg)*www.staedtler-logistik.de*
*Products:* StatistikPROFI/2, e-freight, SCALA, TRAMPAS, LogistikPROFI/2

**DROW GmbH** (Nürnberg) *www.drow.de*

**DS Datentechnik und Softwareentwicklung Müftahi GmbH** (Hanau) *www.ds-hanau.de*
*Products:* Working Process Metallisation, Marketing, Production Planning and Work-preparing, Working Process Extrusion , Working Process Laminating, Working Laminating by Extrusion, General Features, Working process Coating, Pre-Calculation, Working Process Deep-dr

**DSM Handhabungssysteme GmbH & CO.KG** (Westerstede-Moorburg) *www.terastore.de*
*Products:* TERASTORE ArchiveEngine, TERASTORE Jukeboxes

**DVBN Deutsches Vergabe- und Beschaffungsnetz GmbH** (Berlin) *www.dvbn.de*
*Products:* IT Infrastructure

**dvs.net IT-Service GmbH** (Velbert) *www.dvs.net*

**e.bootis ag** (Essen) *www.ebootis.de*

**EFT Computer Solutions GbR** (Brunnthal) *www.eft.de*
*Products:* Tournament

**eggheads CMS GmbH** (Bochum) *www.eggheads.de*
*Products:* cmi24

**Ehrhardt + Partner GmbH & Co. KG** (Boppard-Buchholz) *www.ehrhardt-partner.com*
*Products:* Pick Manager, LFS 400

**ektosym GmbH** (Frankfurt) *www.ektosym.com*
*Products:* openhand, communito

**ElectronicSales GmbH** (Parsberg) *www.electronicsales.de*
*Products:* es:shop

**Elmar/P/Wach eCommerce Consulting** (Hamburg) *www.elmarpwach.com*

**emendis GmbH** (Erlangen) *www.emendis.de*

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**empolis GmbH** (Gütersloh) *www.empolis.com*
*Products:* empolis:Content Lifecycle Suite (e:CLS), empolis:Information Access Suite (e:IAS), empolis:Service Lifecycle Suite (e:SLS)

**encoway GmbH** (Bremen) *www.encoway.de*
*Products:* K-Config, K-Assistant, K-Select

**envi-systems GmbH** (Darmstadt) *www.gw-manager.com*
*Products:* GW-Manager

**EPAM Systems GmbH** (Frankfurt am Main) *www.epam.com*

**EPLAN Software & Service** (Monheim am Rhein) *www.eplan.de*
*Products:* EPLAN Cabinet, EPLAN Electric P8, EPLAN Fluid, EPLAN PPE, EPLAN Engineering Center

**e-pro solutions GmbH** (Stuttgart) *www.e-pro.de*

**Eproplan GmbH** (Stuttgart) *www.eproplan.de*

**ETB GmbH** (Duesseldorf) *www.etb-gmbh.de*

**Excel Data Dutschland AG** (Paderborn) *www.exceldata.de*
*Products:* InfoSuite

**f&s Computer und Software Vertriebs GmbH** (Neuenhagen bei Berlin) *www.fs-soft.com*
*Products:* Webshop IBIS professional

**F.I.R.S.T. Gesellschaft für technsich-wissenschaftliche Softwareanwendungen mbH** (Wermelskirchen) *www.FIRSTGmbH.com*
*Products:* CONVAL

**Fabasoft D Software GmbH** (Frankfurt) *www.fabasoft.de*
*Products:* Fabasoft eGov-Suite

**FibuNet GmbH** (Quickborn) *www.fibunet.de*
*Products:* FibuNet

**flexis AG** (Stuttgart) *www.flexis.de*
*Products:* Levelling / Balancing, Reference Sequencing, Master Schedule planning, Supply Cockpit, Damand- / Capacity Management, Flexibility Management, Inbound Monitoring, Outbound Monitoring , Order Slotting, Pre-Assembly control, sequencing, Online Sequence Visua

**Flintec GmbH** (Mannehim) *www.flintec.de*
*Products:* Annabelle

**Foconis AG** (Aidenbach) *www.foconis.de*
*Products:* Foconis Contract and license administration, Foconis Time- and Holidaymanagement

**Fraunhofer IAO** (Stuttgart) *www.e-business.iao.fraunhofer.de/*
*Products:* ARPOS

**Freudenberg IT KG** (Weinheim) *www.freudenberg-it.com*

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**froMOS GmbH** (Taucha) *www.fromos.de*
*Products:* froMOS Business Management System

**f-soft, Fritsche & Sohn** (Muelheim-Kaerlich) *www.f-soft.com*
*Products:* "Heat transition" WDurch

**FUF // Frank und Freunde GmbH** (Stuttgart) *www.fuf.de*

**Fujitsu Siemens Computers** (Munich) *fujitsu-siemens.com*

**Futureware GmbH** (München) *www.fwsw.de*
*Products:* Application Development

**G.E.I. KRAMER & HOFMANN mbH** (Kleinblittersdorf) *www.interhost.de*
*Products:* XPAT

**GASSENHUBER Systementwicklung** (Regensburg) *www.gassenhuber.de*
*Products:* DATAform Add-on

**GDK Gesellschaft für Datenverarbeitungs- und Kommunikationssysteme mbH** (Straßenhaus) *www.gdkmmbh.de*
*Products:* Inventor-Tools

**GDS mbH** (Grasbrunn) *www.gds-mbh.de*

**GEBRA mbH** (Aachen) *www.gebra-aachen.de*

**GECO Systems GmbH** (Hamburg) *www.geco-group.com*

**Gedos Software GmbH** (Meerbusch) *info@gedos-software.de*
*Products:* CHiEF Mirroring, HW-Watchdog, CHiEF Analyser, CHiEF Alerting-Management, GSP, CHiEF Building Services / Contact-Monitor, CHiEF WEB-Monitor, CHiEF SNMP-Monitor, CHiEF WINDOWS-Monitor, CHiEF SAP Monitor, CHiEF, CHiEF System Monitor

**GEFASOFT AG** (Muenchen) *www.gefasoft.de*
*Products:* Legato MES, Legato ACM, GraphPic

**GEFEG Gesellschaft für Elektronischen Geschäftsverkehr mbH** (Berlin) *www.gefeg.com*
*Products:* GEFEG.FX, GEFEG.Validation

**gefu** (Boeblingen) *www.gefu-gmbh.de*

**GEMOS Gesellschaft für moderne Software mbH** (Weissach im Tal) *www.gemos.com*

**GeNUA mbH** (Kirchheim) *www.genua.eu*
*Products:* GeNUScreen firewall, GeNUGate firewall, GeNUBox remote maintenance appliance

**GES Systemhaus GmbH** (Wiesbaden) *www.ges-systemhaus.de*
*Products:* keydox

**Gesellschaft für InformationsSysteme mbH** (Hannover) *www.gish.de*

**GFaI Gesellschaft zur Förderung angewandter Informatik** (Berlin) *www.gfai.de*
*Products:* InfoCABLE®

**GISE mbH** (Muenchen) *www.gise.com*

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**godesys AG** (Mainz) *www.godesys.de*
*Products:* SO: BUSINESS SOFTWARE

**GONICUS GmbH** (Arnsberg) *www.GONICUS.de*
*Products:* GOsa²

**GORBIT GmbH** (Bergisch Gladbach) *www.gorbit.de*
*Products:* RUF XE

**GRASS GmbH** (Bad Kreuznach) *www.coAgo.com*
*Products:* coAgo MES

**GS Software AG** (Dortmund) *www.gs-software.de*
*Products:* GS HomepageBuilder, GS ShopBuilder Dynamic, GS BusinessManager, GS ShopBuilder, GS HomepageBuilder Dynamic

**GS1 Germany GmbH** (Köln) *www.gs1-germany.de*

**GSE Software Solutions** (Freudenberg) *www.gse-software.com*
*Products:* GSE-PPS

**GUBSE AG** (Schiffweiler) *www.gubse.com*
*Products:* SIHOT

**HABEL GmbH & Co. KG** (Rietheim-Weilheim) *www.habel.de*
*Products:* HABEL ® Dokumentenmanagement

**Hannappel SOFTWARE GmbH** (Wiesbaden) *www.elcosystem.de*
*Products:* elcoCAD R4, elcoPower NS, elcoCAD GA, elcoCAD eTFM, elcoCAD iQ, elcoPower MS

**HanseNet** (Hamburg) *www.alice-business.de*

**HAORGA GmbH** (München) *www.haorga.com*
*Products:* VisionLite, OPSIS-J

**HEC Harald Eul Consulting** (Bruehl) *+49 223 2200879*

**Heuser Datenbank-Applikationen** (Bergisch Gladbach) *www.myhda.de*
*Products:* GIPSY 4.7

**hmd-software ag** (Andechs) *www.hmd-software.com*
*Products:* hmd.Steuerberatersoftware

**Hoering Management Consulting** (Bergisch Gladbach) *www.hmc-cp.de*

**Höft & Wessel AG** (Hannover) *www.hoeft-wessel.com*
*Products:* skeye.integral2 UHF

**Hohlfeld Computersysteme** (Cunewalde) *www.hohlfeld.de*
*Products:* PC-FRIEDHOF Software zur Friedhofsverwaltung

**HRF GmbH & Co. KG** (Reinheim) *www.hrf.de*
*Products:* Sales Promotion IVS, Organizational Data Handling BDE, Workshop Scheduling WPS, Tire Storage Administration RLV, Rental and Courtesy Car Administration MEV, Workshop Scheduling WPS Module ABS

**hsh-systeme für prozess-IT gmbh** (neckarsulm) *www.hsh-systeme.de*
*Products:* Process control system KASTOR, ManDos - Computer-assisted manual dosing station, MES solutions with Simatic IT, Control, PI - Plant Intelligence , HostLink - configurable software gateway solution

**hybris GmbH** (München) *www.hybris.com*
*Products:* hybris Commerce Suite B2B, hybris Print Suite, hybris PIM Suite, hybris Commerce Suite B2C

**Hypersoft Information Systems** (München) *www.hypersoft.com*
*Products:* Hypersoft OmniAnalyser™ , Hypersoft OmniContext™

**hyperspace GmbH** (Peine) *www.hyperspace.de*
*Products:* hyScore

**I.T.E.N.O.S. GmbH** (Bonn) *www.itenos.de*
*Products:* activeOperation, activeAccess

**IABG** (Ottobrunn) *+49 89 6088 2030*
*Products:* HiMoNN

**ICON Supply Chain Management** (Karlsruhe) *www.icon-scm.com*
*Products:* ICON-SCM

**ICS International AG** (Neu-Anspach) *www.ics-ident.de*
*Products:* 4mobile OnTour (Mobile Fleet Management), 4mobile Service (Mobile Asset Management), Stradivari Warehouse Management Software

**IDAT GmbH** (Darmstadt) *www.idat.de*
*Products:* SpriCAD

**IDS GmbH** (Herne) *www.ids-gmbh.com*

**IDS Scheer AG** (Hamburg) *+49 40 226600*
*Products:* ARIS Platform

**iff consulting+software GmbH** (Pfalzgrafenweiler) *www.iff.de*
*Products:* LIGNOS-X

**IGEL Technology** (Bremen) *www.igel.com*

**IIT Gesellschaft fr Innovative Informations-Techniken mbH** (Waldbronn)*www.iit-gmbh.de*
*Products:* AIS TaxAudit (GDPdU), IDEA, REDIS.win, REDIS, DataImport 6.0

**IKOR Management- und Systemberatung GmbH** (Oberhausen) *www.ikor.de*
*Products:* UNIVAS Process Control, ABAKUS Application processing , VERA Determination of input tax

**Imatics Software GmbH** (Falkensee) *www.imatics.de*
*Products:* Imatics ProcessSuite

**im-brain GmbH** (Dortmund) *www.im-brain.com*

**IMMO-DATA AG** (Bochum) *www.immo-data.com*

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**Im-prove Business Consulting GmbH** (Eckental) *www.im-prove.biz*
*Products:* Individual portal solutions, TACS security solution with authentication infrastructure

**IMS GmbH** (Dinslaken) *www.imsware.de*
*Products:* IMSware

**IMST GmbH** (Kamp-Lintfort) *www.imst.de*

**INCAS Voice Solution GmbH & Co. KG** (Krefeld) *www.incas-voice.de*
*Products:* FrontOffice

**INCONY AG** (Paderborn) *www.incony.de*
*Products:* ANTEROS.pk - catalog on button press

**Infopark AG** (Berlin) *www.infopark.de*
*Products:* Infopark CMS Fiona

**Informatikerbüro Kesten** (Mechernich-Lessenich) *www.hkesten.de*

**Informationsverarbeitung Michael Jeschak** (Schwelm) *www.iMJ-Jeschak.de*
*Products:* FerroX

**InfoSecure Deutschland GmbH** (Mainz) *+49 613 127 79979*

**Infosim GmbH & Co. KG** (Würzburg) *www.infosim.net*
*Products:* StableNet Suite

**Infotrax** (Siegen) *www.prometa.de*
*Products:* ProMeta

**Ing.-Büro B.Rath** (Berlin) *www.gaebtoolbox.de*
*Products:* GAEB Toolbox

**Ingenieurbüro HORST** (Böblingen) *www.ing-services.de*

**INGRES Corporation** (Langen) *www.ingres.com*
*Products:* OpenROAD, Ingres, EDBC® , Ingres Icebreaker, Enterprise Access, Ingres Icebreaker BI Appliance

**inmedias.it GmbH** (Hamburg) *www.inmedias.it/*
*Products:* docomino - print to process

**INOSOFT AG** (Marburg) *www.INOSOFT.de*

**inotec Barcode Security GmbH** (Neumünster) *www.inotec.de*
*Products:* Barcode Labelling

**INPLAN RUHR Informationstechnik GmbH** (Oberhausen) *www.inplan.de*
*Products:* INPLAN Purchasing, INPLAN Navigation, INPLAN Port Management

**InQu Informatics GmbH** (Dresden) *www.inqu.de*
*Products:* f@stcheck.CAQ, f@stflow.BDE, f@stchain.APS

**instantOLAP Deutschland GmbH** (Frankfurt) *www.instantolap.de*
*Products:* instantOLAP

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**Intermediate GmbH & Co. KG** (Karlsruhe) *www.intermediate.de*
*Products:* INTERMEDIATE crm, INTERMEDIATE cms, INTERMEDIATE configurator, INTERMEDIATE webconfigurator

**InterRed GmbH** (Siegen) *www.interred.de*
*Products:* InterRed Content Agents, InterRed RhoLive, InterRed Online, InterRed Print, InterRed Enterprise

**INTES GmbH** (Stuttgart) *www.intes.de*
*Products:* PERMAS

**INTRACALL AG** (Krefeld) *www.intracall.de*
*Products:* INTRACALL

**Intradus GmbH** (Ahaus) *www.intradus.com*
*Products:* NetCleanse

**IntraFind Software AG** (Planegg) *www.intrafind.de*
*Products:* TopicFinder, iFinder

**inubit AG** (Berlin) *www.inubit.com*
*Products:* inubit IS

**InVision Software AG** (Ratingen) *www.InVisionWFM.com*
*Products:* InVision Enterprise WFM

**IPS Inst. f. Personalschulung GmbH** (Bielefeld) *www.ips-bielefeld.de*

**ISEC7 GmbH** (Hamburg) *www.isec7.com*

**ISIDATA GmbH** (Hannover) *www.isidata.eu*
*Products:* epon, vip

**iSM-Institut fuer System-Management GmbH** (Rostock) *www.secu-sys.com*
*Products:* bi-Cube IPM, USB-Blocker, bi-Cube SSO Professional

**ITCcon GmbH** (Potsdam) *www.itccon.com*

**itelligence AG** (Bielefeld) *www.itelligende.info*
*Products:* SAP All-in-One based on SAP ERP

**ITSM GmbH** (Langenfeld) *www.itsm.de*
*Products:* CRM easy

**itsystems Deutschland AG** (München) *www.itsd.de*

**ITVT GmbH** (Leonberg) *www.itvt.de*
*Products:* ITVT REGIS (Regulatory compliance for utilities)

**jambit GmbH** (München) *www.jambit.com*

**Jedox GmbH** (Freiburg) *www.jedox.com*
*Products:* Jedox Supervision-Server, Jedox Worksheet-Server, Jedox Palo-Server (OLAP)

**Jericho Informationstechnik GmbH** (Warendorf) *www.jericho.de*
*Products:* Jericho Maschinenbau

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**JMMG Communications** (Königswinter) *www.jmmgc.com*
*Products:* Operation Center

**julitec GmbH** (Erlangen) *www.julitec.de*
*Products:* julitecCRM, julitecDM

**K&P Computer Service- und Vertriebs-GmbH** (Wiesbaden) *www.kpc.de*

**K+P Softwaretechnik** (Herford) *www.kp-software.de*
*Products:* texManager

**kanzleirechner.de GmbH** (Köln) *www.kanzleirechner.de*
*Products:* LawFirm Enterprise, LawFirm Professional, LawFirm Standard

**kapaya software gmbh** (Kirchzarten) *www.kapaya.com*

**KDV Kanne Datenverarbeitung GmbH** (Detmold) *www.kdv-dt.de*
*Products:* KDVZDE, Medtec, VBWS/Versta, KDV-LOHN

**Keding Computer-Service** (Hamburg) *www.keding-direct.de*

**Kern AG** (Freiburg) *www.kern.ag*
*Products:* Kern Acitvity, Kern Process, Kern OPO, Kern Design

**KiRa Informatik GmbH** (Scheer) *www.kiratik.de*
*Products:* FoodOffice

**Klopprogge Datentechnik** (Bad Rappenau) *www.savis-dms.de*
*Products:* savis-dms

**Koelmel Computer GmbH** (Rastatt) *www.koelmel.de*
*Products:* TechMO

**Kreutz & Partner GmbH** (Köln) *www.kreutz-partner.de*

**kronsoft e.K.** (Ottweiler) *www.kronsoft.com*

**kuehlhaus AG** (Weinheim) *www.kuehlhaus.com*

**kuehn & weyh Software GmbH** (Freiburg) *www,kwsoft.de*

**KuglerConsulting GmbH** (Murrhardt) *www.kuglerconsulting.com*
*Products:* WMS Warehouse Managemnt System

**Kupitz Computer-Service GmbH** (Bad Rappenau) *www.kupitz-computer.de*

**KYOCERA MITA DEUTSCHLAND GmbH** (Meerbusch) *www.kyoceramita.de*

**Lampertz GmbH & Co. KG** (Hof) *www.lampertz.com*
*Products:* Lampertz Media Safe, Lampertz Modular Safe

**Landrix SE - Dipl.-Inf. Sven Harazim** (Radebeul) *www.landrix.de*
*Products:* Landrix Auftrag

**Lattwein GmbH** (Düren) *www.lattwein.de*
*Products:* CPG-SAP-Shell, CPGxml, CPGJDBC, CPG

**Lawfirm, Rechtsanwaltskanzlei & Sachverständigenbüro Lange** (Hamburg) *www.dataaudit.de*



**LEAN GmbH** (Neuss) *www.lean.de*
*Products:* Climatisation leanPACK

**LexxKom KG** (Kiel) *www.lexxkom.de*
*Products:* IndiKom

**Libelle Sales + Services GmbH & Co. KG** (Stuttgart) *www.libelle.com*
*Products:* BusinessShadow®

**LiHAS - LinuxHaus Stuttgart** (Stuttgart) *lihas.de*

**Lingenio GmbH** (Heidelberg) *www.lingenio.de*
*Products:* Translate, Office Dictionary

**Linuxwerft GmbH & Co KG** (Hamburg) *www.linux-solution-park.de*

**LITPLUS** (Kürten) *www.LITPLUS.de*
*Products:* LITPLUS

**Loc4All - Localization of Software & Documentation** (Dortmund) *www.loc4all.com*
*Products:* Horsian.com - International Horse Search with Photo Gallery

**LOG:IT** (Regensburg) *www.log-it.biz*
*Products:* [dilos], [mpd], [net.Label], DocuWare

**LogAgency GmbH** (Dortmund) *www.logagency.de*

**LogControl GmbH** (Pforzheim) *www.logcontrol.de*
*Products:* LogControl-WHM, LogControl-SLO, LogControl-SCM

**logic systems GmbH** (Bochum) *www.logicsystems.de*
*Products:* BO-Cash® Business Simulation

**LSK Data Systems GmbH** (Dieburg) *www.lsk-data.de*
*Products:* Omega PC, Alpha Office ONE

**lsp - linux solution park GmbH** (Hamburg) *www.linux-solution-park.de*

**LucaNet AG** (Berlin) *www.lucanet.com*
*Products:* summa • businesspilot CO, summa • one, summa • businesspilot LC

**LUTRONIK Software GmbH** (Wesel) *www.lutronik.de*
*Products:* VIAS, VIAS_W

**LUTUM+TAPPERT DV BERATUNG GMBH** (Bonn) *www.lutumtappert.de*
*Products:* EasyMap, DistrictManager

**Macnetix GmbH** (Berlin) *www.macnetix.com*
*Products:* editIT / playIT, IPTV-HD

**mad geniuses GmbH** (München) *www.madgeniuses.net*
*Products:* pixi* Mailordersoftware

**Magic Software Enterprises (Deutschland) GmbH** (Ismaning) *www.magicsoftware.com*

**MAGMA GmbH** (Aachen) *www.magmasoft.de*
*Products:* MAGMASOFT®

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**mainstorconcept GmbH** (Karlsruhe) *www.mainstorconcept.de*

**manage.it GmbH & Co. KG** (Augsburg) *www.manage.de*

**Manfred Rausch GmbH** (Stuttgart) *www.ramops.de*
*Products:* Xybermotive

**Marcam Engineering GmbH** (Bremen) *www.marcam.de*
*Products:* VisCAM Mesh, VisCAM View, VisCAM RP

**Matoma Internet Consulting GmbH** (Trossingen) *www.matoma.de*
*Products:* matoma.net

**Max Software Engineering GmbH** (Freital) *www.maxsoftware.de*

**maxess systemhaus gmbh** (Kaiserslautern) *www.maxess.eu*
*Products:* decision-cockpit, x-trade

**MBL GbR** (Geisenfeld) *www.mblgbr.com*
*Products:* IMPL3000

**Media Soft Software Technology GmbH** (Tholey) *www.media-soft.com*
*Products:* OTEC

**Media-Print Digital Gesellsschaft für elektronische Dienstleistungen mbH** (Bochum) *www.mpdigital.de*
*Products:* CX30 MediaAssetDeliverer M.A.D., CX30 TechnicalWriter, CX30 MediaAssetManager M.A.M., CX30 InfoManager, CX30 DynamicObjectSwapper D.O.S., CX30 DatabasePublisher, CX30 AdManager, CX30 CatalogPLUS, CX30 CatalogManager, CX30 ProductManager, CX30 ProductPrese

**mediatis AG** (Frankfurt) *www.mediatis.de*

**mention Software GmbH** (Berlin) *www.mention.de*
*Products:* mention® Management environment

**MENTOPOLIS CSC GmbH** (Miltenberg) *www.mentopolis.de*

**Metafer GmbH** (Oberhausen-Kreut) *www.metafer.de*
*Products:* DocumentFinder

**MHM-Systemhaus GmbH** (Stuttgart) *www.mhm-systemhaus.de*

**MIC software e. K.** (Achern) *www.micsoftware.de*
*Products:* Management Information-&Controlling-Systems

**Michael Fraberger GmbH** (Starnberg) *www.fraberger.com*
*Products:* Hausverwaltung, HTML-Generator

**MicroMediaArts GmbH** (Cologne) *www.micromediaarts.de*
*Products:* creadot

**microPLAN GmbH** (Emsdetten) *www.microplan.de*

**MicrotronX Hard- & Software** (Tapfheim) *www.microtronx.de*
*Products:* MicrotronX ERP

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**MID/Information Logistics** (St. Leon-Rot) *www.mid-heidelberg.de*
*Products:* Antenna House XSL Formatter

**Mindjet GmbH** (Alzenau) *www.mindjet.com*
*Products:* MindManager Pro 7

**MIRAI GmbH** (Heidenheim) *www.erp2.de*
*Products:* ERP2

**moresophy GmbH** (Munich) *www.moresophy.com*
*Products:* L4 Semantic NetWorking

**MOSER GmbH & Co.KG** (Wuerselen / AACHEN) *www.moser.de*

**Motz Computer Service u. Vertriebs GmbH** (Höxter) *www.motz.de*

**MOVIS Mobile Vision GmbH** (Offenbach a.M.) *www.movis-gmbh.de*

**MPDV Mikrolab GmbH** (Mosbach) *www.mpdv.de*
*Products:* HYDRA MES

**MSI Software GmbH** (Hanau) *www.msi-software.de*
*Products:* MSI Reifen

**Müller GmbH** (Sigmaringen) *www.mueller-edv.de*
*Products:* DL-x, Desk-x, mobil-xV, Desk-Kx

**MWM Software & Beratung GmbH** (Bonn) *www.mwm.de*
*Products:* MWM-Libero, MWM-Pisa

**myfactory Software GmbH** (Frankfurt am Main) *www.myfactory.com*
*Products:* myfactory.BusinessWorld

**Nemetschek Bausoftware GmbH** (Achim) *www.baufinancials.eu*
*Products:* DocuWare Connect, iPunkt, BAU financials TRAB, MIS Connect, BAU financials KiFa, BAU financials BK, BAU financials BT

**NetFederation Interactive Media GmbH** (Köln) *www.net-federation.de/*
*Products:* Maintenance, Video / Events, Software, Text, Design / Production, Research

**NETPLAN Reetz GbR** (WORMS) *www.netplan.de*
*Products:* Operation control centres, Network planning

**Network Vision GmbH** (Oberhaching) *www.network-vision.eu*
*Products:* IntraVue

**NEXNET GmbH** (Berlin) *www.nexnet.de*

**NextiraOne Deutschland GmbH** (Hannover) *www.nextiraone.de*

**nGroup GmbH & Co. KG** (Hildesheim) *www.ngroup.info*
*Products:* eEvolution, eEvolution ERP

**NiCE GmbH** (Leonberg) *www.nice.de*

**Nix & Keitel Software GmbH** (Gelnhausen) *www.nixkeitel.com*

**noctron e.K.** (Eschweiler) *www.noctron.de*

**noeske netsolutions GmbH** (Oberursel) *www.noeske.de/*
*Products:* nn-WebInvoice, nn-WebClient, nn-AS400/Connector, nn-ELO for Banking

**o-b-s GnbH** (Aachen) *tni@o-b-s.de*
*Products:* obserwer®.PM, obserwer®.FLS , obserwer®.ESK

**OEHL.NET GmbH** (Köln) *www.oehl.net*
*Products:* knowledge21.net - EduCommerce-Plattform

**Onesoft AG** (Dinkelsbühl) *www.onesoft.de*
*Products:* Onesoft Modul-Lsungen

**ONVENTIS GmbH** (Stuttgart) *www.onventis.de*
*Products:* TradeCore Shop&Procure, TradeCore SRM on demand

**OP&S Software GmbH** (Garbsen) *www.ie-center.de*
*Products:* ZEIT-AUF, ZEIT-ART, OPUSPLAN

**Open New Media GmbH** (Koblenz) *www.onm.de*
*Products:* netUpdater LIVE

**Opitz Consulting GmbH** (Gummersbach) *www.opitz-consulting.de*

**ORCA Software GmbH** (Rosenheim) *www.ausschreiben.eu*
*Products:* www.ausschreiben.eu

**Orga Systems GmbH** (Paderborn) *www.orga-systems.com*

**Orgarevi GmbH** (Hannover) *www.orgarevi.de*
*Products:* Cost Estimation Tool, Memberline

**ORGA-SOFT Organisation und Software GmbH** (Filderstadt) *www.seminarverwaltung.eu*
*Products:* OS-BIZ

**OTARIS Interactive Services GmbH** (Bremen) *+49 421 2208 120*

**Otris Software AG** (Dortmund) *www.otris.de*
*Products:* DOCUMENTS, CONTRACT, Privacy Guard

**PA Consulting Group** (Frankfurt) *www.paconsulting.com*
*Products:* People & Transformation Management, Managing Business Complexity, Strategy & Marketing, Business Transformation, Information technology, Technology & Innovation, Innovation Management, Performance Improvement, Business Model Optimisation

**Pangora GmbH** (München) *www.pangora.com*
*Products:* Pangora Marketplace Technology

**Panvision GmbH** (Essen) *www.panvision.de*
*Products:* PANSITE, PANFLOW, PANBASE

**partnermedia** (Frankfurt am Main) *www.partner-media.de*

**PASCAL Beratungsgesellschaft fuer Datenverarbeitung mbH** (Hamburg) *www.pascal.de*
*Products:* NUCLEUS Large Account Sea, ZENTAUR Clothings, INTEGRA

**PAV CARD GmbH** (Luetjensee) *www.pavcard.de*

**pdv.com Beratungs-GmbH** (Bremen) *www.pdvcom.de*

**Pentos AG** (Munich) *www.pentos.com*

**Peppermint Park Studios GmbH** (Hannover) *www.peppermint-park.com*

**Perlitz Strategy Group** (Mannheim) *www.pipelineplanner.com*
*Products:* PipelinePlanner

**PES-Ingenieurgesellschaft mbH** (Kleinkahl) *www.gefahrstoff.com*
*Products:* epos hazardous substances manager

**Piwinger & Lau** (Koblenz) *www.piwingerundlau.de*
*Products:* Enterprise Portal Uneon

**PLANTA Projektmanagement-Systeme GmbH** (Karlsruhe) *www.planta.de*
*Products:* PLANTA Project Portfolio Management (PPPM), PLANTA Project Management System (PPMS) , PLANTA Professional Services Automation (PPSA) , PLANTA Request Management (PREQ)

**PORTOLAN Commerce Solutions** (Ilsfeld) *www.PortolanCS.com*
*Products:* PORTOLAN iEVM

**positix GmbH** (Rheinbach) *www.positix.de*
*Products:* positix MOS ACS, positix ACS

**Praceus & Jger Informatik GmbH** (Braunschweig) *www.pj-informatik.de*
*Products:* DOOR

**PRACMA Ltd. Germany** (Cologne) *www.pracma.de*
*Products:* Document Management System (DMS), Custom Conflict Management, Personnel Management, Calendar ActiveX Component, Email Archiving, nareo, Capacity Planning

**primion Technology AG** (Stetten a.k.M.) *www.primion.de*
*Products:* VisualWeb Time

**PRIMUS Solutions AG** (Warngau) *www.primus-solutions.com*
*Products:* ORACLE E-Business Suite

**PRO DV Software AG** (Dortmund) *www.prodv.com*
*Products:* deNIS IIplus

**processware GmbH** (Dortmund) *www.processware.de*
*Products:* knowWare

**PRODATIC-EDV-KONZEPTE GMBH** (Wermelskirchen) *www.prodatic.de*

**Prof. Versteyl Rechtsanwälte** (Burgwedel) *www.versteyl.eu*

**profil systems GmbH** (Bad Essen) *www.profilsys.de*
*Products:* profiLag SMS

**Projektron GmbH** (Berlin) *www.projektron.de*
*Products:* Projektron BCS

**projektwerk GmbH** (Hamburg) *www.projektwerk.de*

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**PROLOGA GmbH** (Halle (Saale)) *www.prologa.de*
*Products:* PROLOGA Legal Requirements, PROLOGA Route and District Planning, PROLOGA Mobile Order Management

**proLOGiT Office & Logistics Software Dev.** (Dortmund) *www.prologit.de*
*Products:* LocoPlan

**proventis GmbH** (Berlin) *www.proventis.net*
*Products:* Blue Ant

**PROZEUS - Prozesse und Standards** (Köln) *www.prozeus.de*
*Products:* eBusiness practice for SMEs

**PS4B-Professional Solutions for Business GmbH** (Kronberg) *www.ps4b.de*

**Psion Teklogix GmbH** (Willich) *www.psionteklogix.com*

**PSIPENTA Software Systems GmbH** (Berlin) *www.psipenta.de*
*Products:* PSIpenta.com

**PTV AG** (Karlsruhe) *www.ptv.de*

**Pürner Unternehmensberatung** (Dortmund) *www.puerner.com*

**QKom GmbH** (Kobern-Gondorf) *www.qkom.net*

**QlikTech GmbH** (Düsseldorf) *www.qlikview.com*
*Products:* QlikView

**QSC Quality Software & Consulting GmbH & co KG** (Köngen) *www.qsc-group.com*

**quaris GmbH** (Worms) *www.quaris.de*

**Quester** (Hamburg) *www.olfolders.de/*
*Products:* OLfolders, OLfolders PE, QSynchronization

**Quintalog Systemhaus GmbH** (Hamburg) *www.Quintalog.de*

**R+K Unternehmensberatung GmbH** (Stuttgart) *www.ruk-beratung.com*

**RA-MICRO Frankfurt Vertriebs GmbH** (Frankfurt) *www.ra-micro-frankfurt.de*

**RDS Consulting GmbH** (Düsseldorf) *www.rds.de*

**retarus GmbH** (Munich) *www.retarus.com*
*Products:* Retarus eSign, COMMunix XC, RMX Managed E-Mail Services, Domino Disclaimer, Retarus WebExpress 2.0, Faxolution für Windows, Faxolution für SAP®, Vertragsmanagement, Retarus webEDI, Retarus eFax, E-Mail Broadcast

**RFID Konsortium GbR** (Aachen) *www.rfid-konsortium.de*
*Products:* RFID Sprinter

**rhv GmbH** (Duisburg) *www.rhvsoftware.com*

**Riemann Softwareentwicklung** (Heidenheim) *+49 7321 951690*
*Products:* ShopManager

**Rillsoft GmbH** (Leonberg) *www.rillsoft.de*
*Products:* Rillsoft Project

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**Robotron Datenbank-Software GmbH** (Dresden) *www.robotron.de*
*Products:* robotron*ecount

**rocotron** (Leipzig) *www.rocotron.com*

**Roesch GmbH** (Offenburg) *www.roesch.de*

**Rother-DATA GmbH** (Peine) *www.rother-data.com*

**RR Software GmbH** (Hasselfelde) *www.antrago.de*

**S&D Software nach Mass GmbH** (Dillingen) *www.s-und-d.de*
*Products:* SpeedIT

**s.a.d Systemanalyse und -Design GmbH** (Kassel) *www.sad-net.de*
*Products:* Projektzeitenmanager

**S.O.S. GmbH** (Pfaffenheck) *www.sosgmbh.de*

**Sage baeurer GmbH** (VS-Villingen) *www.sagebaeurer.de*
*Products:* baeurer trade, baeurer wincarat, baeurer industry

**Sander + Partner GmbH** (Goch) *www.winworker.de*
*Products:* WinWorker

**SAP** (Walldorf) *www.sap.com*
*Products:* SAP Customer Relationship Management

**saracus consulting GmbH** (Münster) *www.saracus.com*

**SaSo, Software und Consulting GmbH** (Muenchen) *www.saso.de www.gmps5.de*

**SCAI GmbH** (Leverkusen) *www.scai.de*
*Products:* SCAI ODF, SCAI MAS

**Schmidt's LOGIN GmbH** (Muenchen) *www.loginternet.de*
*Products:* LOGINventory

**Schultheis Software** (Munich) *www.schultheis-software.de*
*Products:* Schallplan, Lichtplan

**SCHWAB MARKETING GMBH** (München) *schwab-marketing.com*
*Products:* Hospital Data File

**Schwabensoft GmbH** (Albershausen) *www.schwabensoft.de*
*Products:* CarPromotion Pro

**science + computing ag** (Tuebingen) *www.science-computing.de*
*Products:* scV5, scVenus, s.cluster, flowGuide

**SCM Solutions GmbH** (Dortmund) *www.scmsolutions.de*
*Products:* Infor ERP SyteLine, Infor SyteAPS

**Secardeo GmbH** (Unterföhring) *www.secardeo.de*

**secunet Security Networks AG** (Essen) *www.secunet.com*
*Products:* SINA Thin Client, SINA, secunet biomiddle, secunet multisign, SINA Management, SINA Virtual Workstation, SINA Box

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**SecurIntegration** (Koeln) *www.SecurIntegration.com*
*Products:* SI SmartKiosk, SI EP/Agent, SI WebLogonPad

**SEEBURGER AG** (Bretten) *www.seeburger.com*

**Selbach Information Systems** (Mettmann) *www.selbach-gmbh.de*
*Products:* ProfitBase

**SELLTEC Communications GmbH** (Nuernberg) *www.selltec.de*

**Semantec Engineering and Consulting GmbH** (Herrenberg) *www.semantec.de*
*Products:* DirectInfo, Service Manager

**SER Solutions Deutschland GmbH** (Neustadt/Wied) *www.ser.de*
*Products:* DOXiS iECM

**SFR GmbH** (Cologne) *www.sfr.de*

**SI Software Innovation GmbH** (Neustadt/W.) *www.si-software.de*
*Products:* LDMS

**SieGer Consulting GmbH & Co.KG** (Neuberg) *www.sgc.de*

**Siemens AG Siemens IT Solutions and Services** (Munich) *www.it-solutions.siemens.com*

**Signsoft GmbH** (Dresden) *www.signsoft.com*
*Products:* Signsoft intelliBO

**siNTesiX** (Berlin) *www.sintesix.net*
*Products:* BackupTresor

**SJ Software GmbH** (Aachen) *www.sj-software.de*
*Products:* SJ MEPLA

**skilldeal AG** (Berlin) *www.skilldeal.com*

**Smarstoft GmbH** (Hamburg) *www.smartsoft.de*
*Products:* Smartsoft Business Suite, TimberNav, ContainerPlan, SmartObjectsPro, TimberPlan

**smart-TEC GmbH & Co. KG** (Oberhaching) *www.smart-TEC.com*
*Products:* smart-TAG´s

**SMC GmbH Software Management Consulting** (Aschaffenburg) *www.s-m-c.de*
*Products:* CoP.Track

**SMO GmbH Software Manufaktur Klaus-Dieter Ost und Partner** (Karlsruhe)*www.smo.de*
*Products:* ttyd - Terminalserver Daemon

**SoftBASE Deutschland GmbH** (Unterschleissheim) *www.softbase.de*
*Products:* SoftBASE Business Suite 9.0

**Software - Entwicklung** (Ehningen) *www.richter-software.de*
*Products:* RTC=RPGtoCOBOL

**Software AG** (Darmstadt) *www.softwareag.com*

**Software/Schmiede Vogler&Hauke GmbH** (Neckarsulm) *www.softwareschmiede.com*
*Products:* Professional ERP

**Softwaremanagement.org ITS** (Muenster) *Softwaremanagement.org*
*Products:* Software Management Suite 2007

**soIT GmbH** (Lübeck) *www.soit.de*

**Solventia-Inkasso, Nicole Meinhardt-Fraebel** (Stuttgart) *www.solventia-inkasso.de*

**SonicWALL BV** (München) *www.sonicwall.com*

**speedikon Facility Management AG** (Bensheim) *www.speedikonfm.com*
*Products:* speedikon SP, speedikon FM

**Sprachenmarkt** (Stuttgart) *www.sprachenmarkt.de*

**STAPIS GmbH** (Berlin) *www.my-warehouse.de*
*Products:* my_warehouse

**STEINBEIS-TRANSFER-CENTER INDUSTRIAL DESIGN** (Fellbach) *www.steinbeis-design.de*

**Steria Mummert Consulting AG** (Hamburg) *www.steria-mummert.de*

**Stockmayer GmbH** (Schwaig) *www.stockmayer.de*
*Products:* Project Coaching, Training

**Stollmann Entwicklungs- und Vertriebs-GmbH** (Hamburg) *ww.stollmann.de*
*Products:* NFCMod+, BlueMod+C11/G2

**Stonesoft** (München) *www.stonesoft.de*
*Products:* Stongate Management Center, StoneGate SSL VPN, StoneGate IPS, StoneGate Firewall/VPN

**struktur AG** (Stuttgart) *www.spreed.com*
*Products:* spreed

**SWH Software GmbH** (Berlin) *www.swh-software.de*
*Products:* VIBUS - The Ticket- and Event-Software

**SYCOR GmbH** (Göttingen) *www.sycor.de*

**SYNCING.NET Technologies GmbH** (Berlin) *www.syncing.net*
*Products:* SYNCING.OFFICE

**SYNFOtec Informationssysteme GmbH** (Schortens) *www.synfotec.de*
*Products:* ZyIMAGE

**SynPrax AG** (Frechen) *www.synprax-ag.de*

**Systemhaus Alms & Partner** (Drebber) *www.alms.de*
*Products:* APsolut

**Taurel Unternehmensberatung** (Duesseldorf) *www.service-engineering.info*

**TechniData AG** (Markdorf) *www.technidata.de/eu*
*Products:* REACH Compliance, TechniData CSM, TechniData CfP, TechniData ENVINET, TechniData HSS

**Technogroup IT-Service GmbH** (Hochheim) *www.technogroup.com*

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**Tecnomatix GmbH** (Stuttgart) *www.emplant.de*
*Products:* SiMPLE++, eM-Plant, Plant Simulation

**TEK-Service** (Lörrach) *www.tek-service.de*

**Telenet AG Rhein-Main** (Darmstadt) *www.telenet-ag.de*

**TEMA GmbH** (Kusterdingen) *www.temagmbh.de*

**Tesla CRM Software GmbH** (Neuss) *www.tesla.de*
*Products:* JTheseus, Theseus

**Texas Instruments RFID Systems** (Freising) *www.ti-rfid.com*

**Thax Software GmbH** (Berlin) *www.thax.de*
*Products:* Findentity, QuickOpen

**Thopas GbR** (Erftstadt) *www.thopas.com*
*Products:* TIAS, TDXS

**THS Systems** (Hamburg) *www.ths-systems.de*

**TID Informatik GmbH** (Herrsching am Ammersee) *www.tid-informatik.de*
*Products:* CATALOGcreator

**TimO-Time Management Office GmbH** (Usingen) *www.timoweb.de*
*Products:* Time Management Office

**tmg Technology Marketing GmbH** (Frankfurt) *www.tmg-gmbh.de*

**Tobollik & Partner GmbH** (Velburg) *www.tobollik.de*
*Products:* JelloPremium, JelloStart, JelloCompact, JelloStored

**TOSHIBA TEC Europe** (Krefeld) *www.toshibatec.de*

**TOSHIBA TEC Europe Retail Information Systems S.A.** (Krefeld) *www.toshibatec-eu.de*

**Touchpaper GmbH** (Dreieich) *www.touchpaper.de*
*Products:* Touchpaper IT Business Management (ITBM) Suite

**Transaction Software GmbH** (München) *www.transaction.de*
*Products:* Transbase® - the SQL engine

**TriCAT GmbH** (Ulm) *www.tricat.net*
*Products:* Virtual-interactive 3D Training and Collaboration Platform

**trilab Informationssysteme GmbH** (Böblingen) *www.trilab.eu*
*Products:* triPayment

**Trivadis GmbH** (Stuttgart) *www.trivadis.com*

**TTO GmbH** (Herrenberg) *www.tto.de*
*Products:* TTO Managed Services, TradeXpress Enterprise Suite, TTO Business Process Monitoring

**TUV Rheinland Group** (Cologne) *www.tuv.com*
*Products:* see the list below

**TÜV Rheinland Secure iT GmbH** (Köln) *www.tuv.com*

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**TÜV SÜD Product Service GmbH** (München) *www.tuev-sued.de/ps*

**UMAD GmbH** (Berlin) *www.umad.de*

**UNIDAS Universal-Data-Systems** (Bad Homburg) *www.unidas.com*

**UNIORG Group** (Dortmund) *www.uniorg.de*

**unipo GmbH** (Michelstadt) *www.unipo.de*

**Unternehmensberatung EDV-Anwendungen Dipl.-Ing.(FH) Friedr. W. Wolframm**
(Herzogenaurach) *www.ubw.de*

**up2date-solutions GmbH** (Nürnberg) *www.up2date-solutions.de*
*Products:* Event management service

**update Solutions AG** (Kulmbach) *www.updateAG.de*
*Products:* eBusiness, Semiramis, JobRouter, Business Intelligence, UPOS

**Viaplex GmbH** (Nuernberg) *www.viaplex.de*
*Products:* Document Service Bus, Document Flash Finder

**Voelcker Informatik AG** (Berlin) *www.voelcker.com*
*Products:* ActiveEntry

**Voigt Software und Unternehmensberatung GmbH** (Murr) *www.voigtgmbh.de*
*Products:* V_OLGA - Software for LPG business

**vps ID Systeme GmbH** (Ettlingen) *www.vps.de*
*Products:* IDExpert CMS

**VSB Software-Systeme GmbH** (Saarwellingen) *www.vsb-soft.de*
*Products:* VSB E-Logistics

**W3L GmbH** (Witten) *www.w3l.de*

**Waters GmbH** (Frechen) *www.waters.com/informatics*
*Products:* SDMS, Analytical Workflow Manager (AWM), InSpector, Empower

**Web Commerce GmbH** (Offenburg) *www.w-commerce.de*

**wecon.it-consulting** (Gevelsberg) *www.wecon.net*

**WeinWare** (Flörsheim) *www.weinware.de*

**WeltWeitBau GmbH** (Berlin) *www.wwbau.de*
*Products:* Quality management tool STEPChecker, Internet project platform PlanTeam-Server, Project and document management system PlanNet, STEP converter for ArchiCAD, STEP converter for ARRIBA CA3D, STEP converter for Nemetschek Allplan, Project controlling tool vi

**WERBAS AG** (Holzgerlingen) *www.werbas.com*
*Products:* WERBAS

**Westernacher Products & Services AG** (Bruchsal) *www.westernacher.com*
*Products:* directCMS

**wibfin GmbH** (Nideggen) *www.wibfin.de*

**WIBU-SYSTEMS AG** (Karlsruhe) *www.wibu.com*
*Products:* CodeMeter, SmartShelter + SmartShelter PDF

**WICE GmbH** (Hamburg) *+49 40 4130350*
*Products:* WICE CRM-Groupware

**Wiesemann & Theis GmbH** (Wuppertal) *www.wut.de*

**WOLFGANG KOCH GmbH** (Stuttgart) *wolfgang-koch-gmbh.de*

**WZL OpenOperation GmbH** (Aachen) *www.openoperation.com*
*Products:* myOpenFactory

**XBA Software AG** (Hamburg) *www.xba.net*
*Products:* XBA Rechnungswesen, XBA Personalwesen

**XBo GmbH** (Frankfurt) *www.XBo.de*

**Xerox GmbH** (Neuss) *www.xerox.de*
*Products:* Office Printers, Wide Format, Office Multifunctional Systems, Digital Presses, Continuous Feed Printers, Production Printers & Copiers

**Xpert Design Software** (Stadtbergen) *www.xperttimer.com*
*Products:* Xpert-Timer

**xs2europe business development services** (Munich) *www.xs2europe.eu*

**xx-well.com AG** (Berlin) *+49 30 288 800 600*

**zetVisions AG** (Heidelberg) *www.zetvisions.de*
*Products:* zetVisions Corporate Investment Manager

**ZIP consulting engineers** (München) *www.zip.de*

## Ireland

**IONA Technologies** (Dublin) *www.iona.com*
*Products:* Artix

## Italy

**Araknos Srl** (Bologna) *www.araknos.it*
*Products:* Akab

**Data Ufficio** (Roma) *www.dataufficio.com*
*Products:* SUMMA / KIT commercianti small , SUMMA / Kit Artigiani Full Version Windows Monoutenza

**Digital Graph** (Fonni (NU)) *www.digitalgraph.it*
*Products:* V5 Standard

**Dylog Italia SpA** (Torino) *www.dylog.it/software/index.html*
*Products:* Open Manager

**eDisplay srl** — *www.edisplay.it/*
*Products:* eDisplay Enterprise Small Business

**Idea Software s.a.s.** (San Giorgio di Piano (Bologna)) — *www.isw.it*
*Products:* Mon Ami 3000 – Contabilità

**New Sys** (Barcellona Pozzo di Gotto (ME)) — *www.newsys.it*
*Products:* Invoice Pro

**Open2b Software Snc** (Pisa (PI)) — *www.open2b.com/*
*Products:* Commerce Ready Advanced, Commerce Ready Standard, Commerce Ready B2B

**Qualitas Informatica S.p.A.** (Santorso - Vicenza) — *www.qualitas.it*
*Products:* Qualitas Informatica Net@Pro, Qualitas Informatica MerciaLincs, Qualitas Informatica Planning and Scheduling - Net@Flex

**Web Models** (Milano) — *www.webratio.com*
*Products:* WebRatio

## Latvia

**SIA S Fabrika** (Riga) — *www.swdfactory.com*
*Products:* AWO, Baltic Lines, VIPUS, Container Exchange

**SOFLEX GmbH** (Rottenburg) — *www.soflex.de*
*Products:* SOFLEX-PCS

## Lithuania

**Baltic Software Solutions** (Kaunas) — *www.bss.biz*
*Products:* BSS Finance, BSS SCM, BSS Project Server, BSS Fund Management

**Midpoint systems** (Kaunas) — *www.midpoin.lt*

## Luxembourg

**IGEFI Group Sàrl** (Strassen) — *www.igefi.com*
*Products:* MultiFonds Fund Accounting, MultiFonds Transfer Agency

**Plan-Net s.a.** (Rumelange) — *Plan-Net.lu*
*Products:* Massive storage solutions, VPN deployements, Joomla support, Apache support, Linux servers and workstations support, Firefox support, ThunderBird support, OpenOffice support, Backup solutions, OpenSource solutions trainings, OpenSource solutions help-desk

**TRIANIT S.A.** (Luxembourg) — *www.TRIANIT.com*
*Products:* CorpPresenter, CorpPresenter Enterprise, CongressPresenter

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## Netherlands

**Add-IT Infosystems b.v.** (Albergen) *www.add-it.nl*
*Products:* Addis

**Aduna** (Amersfoort) *www.aduna-software.com*
*Products:* Aduna AutoFocus, Aduna AutoFocus Server

**Agresso** (Sliedrecht) *www.agresso.com*
*Products:* Agresso Businsess World

**Alexion CRM Software** (Groningen) *www.alexion.eu*
*Products:* Alexion Relation Manager

**ASK Community Systems** (Rotterdam) *www.ask-cs.com*
*Products:* ASK

**Bosch Security Systems** (EINDHOVEN) *www.boschsecurity.com*

**COSS Solutions** (Loosdrecht) *www.coss-solutions.nl*
*Products:* Application Development Framework, Taylor made software

**Direct Web Solutions** (Maastricht) *www.directwebsolutions.nl*
*Products:* Webhosting

**DISC B.V.** (Schiphol) *+31 23 5471855*

## Other

**3D3.COM Pty. Ltd.** (Victoria (Australia)) *www.shopfactory.com*
*Products:* Shop Factory Light

**ClearCommerce** (Austin (USA)) *www.clearcommerce.com/*
*Products:* ClearCommerce Payment software

**CODICE SRL** (Repubblica di San Marino) *www.readypro.it*
*Products:* Ready Pro - Magazzino base

**europa3000** (Niedergösgen (Switzerland)) *www.europa3000.ch/*
*Products:* Easy business

**Five9** (Pleasanton (USA)) *www.five9.com*
*Products:* Five9 Virtual Call Center

**Infraplan AG** (Zug (Switzerland)) *www.infraplan.ch*
*Products:* CareMedia TV-Multimediaterminals

**MYOB** (Burwood East (Australia)) *myob.com*
*Products:* MYOB Accounting V16

**Speereo Software** (Saint-Petersburg (Russia)) *www.speereo.com*

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## Poland

**Maxus Net Communications** (Warsaw) *www.maxus.com.pl*
*Products:* CMS MAX

## Portugal

**Critical Software, S.A.** (Coimbra) *www.criticalsoftware.com*
*Products:* Premfire, WMPI, WOWeb, Xception, edgeBOX, CoreCompetence, Imogeo

**ITds** (Alfragide) *www.itds.pt*
*Products:* XEO Sendmail, XEO Platform

**Priberam Informatica, S.A.** (LISBOA) *www.priberam.pt*

**Quadriga** (Alges) *www.frotcom.com*
*Products:* Frotcom

**YDreams - Informática, S.A.** (Monte da Caparica) *www.ydreams.com*
*Products:* Interactive Furniture, YHome

## Romania

**Abstract Connection s.r.l.** (Deva) *www.acon.ro*
*Products:* ABSTRACT

**COMPANIA DE INFORMATICA NEAMT** (PIATRA NEAMT) *www.lex-expert.eu*
*Products:* LEX EXPERT

**CRIsoft** (Brasov) *www.crisoft.ro*

**C-soft SRL** (Miercurea Ciuc) *www.csoft.ro*
*Products:* AS System

**ipericon Solutions S.R.L.** (Bucharest) *www.ipericon.com*

**Nethrom** (Cluj-Napoca) *www.nethrom.com*
*Products:* Networker, HR Nethrom, Networker Shop, projapi

## Spain

**Izanet Global Services S.L** (Zaragoza) *www.izanet.com*

**Seagull Scientific Europe Inc.** (Madrid) *www.seagullscientific.com*
*Products:* BarTender

## Sweden

**IFS** (Linköping) *www.ifsworld.com*
*Products:* IFS Applications

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## United Kingdom

**ADVANCED MARKETING SCIENCES** (London) *www.amsciences.com*
*Products:* AMS Smart Suite by Advanced Marketing Sciences

**Agresso Ltd** (Bristol) *www.agresso.com*
*Products:* Agresso Business World

**Albany Software** (Alton, Hampshire) *www.albany.co.uk*
*Products:* ALBACScs, eCOLLECT, ALBANYverify & eVERIFY, eCONNECTcorporate, ALBACSenterprise, ALBACSip, eCONNECT

**Answer Solutions Ltd** (Ebbw Vale) *www.answersolutions.com*

**Axios Systems Plc** (Edinburgh) *www.axiossystems.de*

**Business Analysis Limited** (Romsey, Hampshire) *www.business-analysis.co.uk*

**COA Solutions Ltd** (Cobham) *www.coasolutions.com*
*Products:* COA Smart Business Suite

**CODA Group International Ltd** (Harrogate) *www.coda.com*
*Products:* Financials, CODA 2control Consolidation and CODA 2control Cash (OCRA), Dream

**ECI² Europe** (Cambridge) *www.eci2.eu*
*Products:* Deliveries Management System (DMS), Progress, Prolink Web

**Epicor** (Birmingham) *www.epicor.co.uk/*
*Products:* Epicor Software (Manufacturing)

**Fast Effective Solutions Ltd** (Isle of Wight) *www.fastsols.co.uk/*
*Products:* S M E - Accounts

**Gelst** (London) *www.gelst.com*
*Products:* Business Opportunity Finder

**HansaWorld UK Ltd.** (Reading) *www.hansaworld.com*
*Products:* First Office

**Intuit** (Maidenhead, Berkshire) *www.intuit.com*
*Products:* INTUIT Quickbase

**ipericon UK Ltd.** (London) *www.ipericon.com*

**Ischus Limited** (Worksop) *www.ischus.co.uk*

**Lawson** (Bracknell) *www.lawson.com*
*Products:* Lawson Human Captial Management, Lawson Enterprise Performance Management, Lawson Services Automation, Lawson Procurement, Lawson Financial Suite

**Mamut Software Ltd** (London) *www.mamut.com*
*Products:* Small Business Concierge, Accounting

**NetSuite** (Maidenhead, Berks) *www.netsuite.co.uk*
*Products:* NetSuite Small Business, NetSuite CRM+, NetSuite's NetCommerce

**Perfect Image Ltd** (Newcastle upon Tyne) *www.perfect-image.co.uk*


**profile analysis ltd** (middlesbrough) *www.i-snapshot.com*
*Products:* i-snapshot

**Salesforce.com UK Ltd** (Camberley, Surrey) *www.salesforce.com/eu*
*Products:* SalesForce Group Edition

**soltec computer systems ltd** (Scunthorpe) *www.soltecsys.co.uk*
*Products:* Sage Additions, Empower+, OpenRoad Traffic, OpenRoad Warehouse

**TAS Software** (Newcastle upon Tyne) *www.tassoftware.co.uk*
*Products:* TAS Books 3

**The Sage Group plc** (Newcastle Upon Tyne) *www.sage.com*
*Products:* Sage Line 50 Accountant 2007, Instant Accounts , Instant Payroll , Sage 50 Intelligent Reporting 2 Workstations, ACT! by Sage Premium for Web, ACT! by Sage Premium for Workgroups 2007, Sage MMS Solutions For Manufacturing, ACT! by Sage 2007

**Vizual Business Tools PLC** (Beckenham) *www.vizual.co.uk*
*Products:* Personnel Manager

**WorldCLASS::APS** (Bidford on Avon) *www.worldclassaps.com/*
*Products:* WorldCLASS:: stand alone APS manufacturing solution

## Open Source Projects (not country-specific)

**Alfresco** *www.alfresco.com/*
*Products:* Alfresco

**Apache Software Foundation** *www.apache.org*
*Products:* Apache OFBiz, Apache Axis, Struts, Apache Geronimo, Apache Tomcat, Apache HTTP Server, Jetspeed 2

**Ardour** *ardour.org/*
*Products:* Ardour

**Bitech AG** *www.bitech.de*

**Bizgres** *www.bizgres.org/*
*Products:* Bizgres

**Blender** *www.blender.org/*
*Products:* Blender

**Bricolage** *www.bricolage.cc/*
*Products:* Bricolage

**ClamAV** *www.clamav.net/*
*Products:* ClamAV

**Compiere** *www.compiere.com/*
*Products:* Compiere

**cuon** *www.cuon.org*

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**Debian** *www.debian.org/*
*Products:* Debian

**DotNetNuke** *www.dotnetnuke.com*
*Products:* Forums Module, Announcements Module, *Core Framework, Repository Module, Gallery Module, User Defined Table Module, Blog Module, Wiki Module, DotNetNuke

**Drupal** *drupal.org/*
*Products:* Drupal

**Eclipse** *www.eclipse.org/*
*Products:* Eclipse

**eGroupware** *www.egroupware.org/*
*Products:* eGroupware

**envia TEL ip centrex** *www.enviatel.de*
*Products:* envia TEL ip centrex

**e-pat** *www.apgmbh.de*

**eZ Systems** *ez.no*
*Products:* eZ Publish

**Fedora** *fedoraproject.org/*
*Products:* Fedora

**First Austrian online furniture outlet** *www.zimmel.eu*
*Products:* Webshop

**FreeBSD** *www.freebsd.org/*
*Products:* FreeBSD

**GanttProject** *ganttproject.biz/*
*Products:* GanttProject

**GCC Compiler Collection** *gcc.gnu.org/*
*Products:* GNU Compiler Collection

**GNOME** *www.gnome.org/*
*Products:* Evolution

**GOsa²** *www.gosa-project.org/*

**IGSuite** *www.igsuite.org*
*Products:* IGSuite

**IT Asset- and Lifecycle Management** *www.thinkware-ag.com*

**Java** *www.sun.com/software/opensource/java/*
*Products:* Java

**JBilling** *www.jbilling.com/*
*Products:* JBilling

**JBoss** *labs.jboss.com/*
*Products:* JBoss Portal, JBoss AS

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**Joomla!** *www.joomla.org*
*Products:* Joomla!

**Knowledge Tree** *www.knowledgetree.com/*
*Products:* Knowledge Tree

**LaTeX** *www.latex-project.org/*
*Products:* LaTeX

**LyX** *www.lyx.org/*
*Products:* LyX

**MediaWiki** *www.mediawiki.org/*
*Products:* MediaWiki

**Mondrian** *mondrian.pentaho.org/*
*Products:* Mondrian

**more.groupware** *www.moregroupware.de/*
*Products:* more.groupware

**Mozilla** *www.mozilla.com/*
*Products:* Mozilla Thunderbird, Mozilla Firefox

**MySQL** *www.mysql.com/*
*Products:* MySQL

**Nagios** *www.nagios.org/*
*Products:* Nagios

**Nuxeo** *www.nuxeo.com*
*Products:* Nuxeo

**OfficeTalk** *www.joops.com/JProdOffi.htm*
*Products:* OfficeTalk

**Onepoint Project Basic/Open Edition** *www.onepoint.at*

**Open Workbench** *www.openworkbench.org/*
*Products:* Open Workbench

**Openbravo** *www.openbravo.com/*
*Products:* Openbravo

**openCRX** *www.opencrx.org/*
*Products:* openCRX

**OpenGroupware.org** *www.opengroupware.org*
*Products:* OpenGroupware.org

**openNMS** *www.opennms.org*
*Products:* openNMS

**OpenOffice.org** *www.openoffice.org/*
*Products:* OpenOffice.org

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**openSuSE** *www.opensuse.org/*
*Products:* openSuSE

**opentaps** *www.opentaps.org/*
*Products:* opentaps

**Open-Xchange** *www.open-xchange.com/header/community_area.html*
*Products:* Open-Xchange

**osCommerce** *www.oscommerce.com/*
*Products:* osCommerce

**OTRS** *otrs.org/*
*Products:* OTRS

**PHP: Hypertext Preprocessor** *www.php.net/*
*Products:* PHP

**phpBB** *www.phpbb.com/*
*Products:* phpBB

**phpGroupware** *phpgroupware.org/*
*Products:* phpGroupware

**PHProjekt** *www.phprojekt.com/*
*Products:* PHProjekt

**Pidgin** *www.pidgin.im/*
*Products:* Pidgin

**Plan-Net router/firewall** *plan-net.lu/index.php?option=com_content&task=view&id=20&Itemid=42*
*Products:* Plan-Net Firewall

**Plone** *plone.org/*
*Products:* Plone

**Portal for Lotus Software** *www.lotus-software.de*

**Postfix** *www.postfix.org/*
*Products:* Postfix

**PostgreSQL** *www.postgresql.org*
*Products:* PostgreSQL

**road building machines** *www.schwickert.com*

**SafeNet Europe** *www.safenet-europe.eu*

**Sendmail** *www.sendmail.org/*
*Products:* Sendmail

**Simple Groupware Solutions** *www.simple-groupware.de*
*Products:* Simple Groupware

**Snort** *www.snort.org*
*Products:* Snort



**SQL-Ledger** — *www.sql-ledger.org*
*Products:* SQL-Ledger

**Subversion** — *subversion.tigris.org/*
*Products:* Subversion

**SugarCRM** — *www.sugarcrm.com*
*Products:* SugarCRM

**The GIMP** — *www.gimp.org/*
*Products:* The GIMP

**Tradingeye Shop Php** — *www.tradingeye.com/*
*Products:* Tradingeye Shop Pro

**TUTOS** — *www.tutos.org*
*Products:* TUTOS

**TWiki** — *www.twiki.org/*
*Products:* TWiki

**Typo3** — *typo3.org/*
*Products:* Typo3

**Ubuntu** — *www.ubuntu.com/*
*Products:* Ubuntu

**vTiger** — *www.vtiger.com/*
*Products:* vTiger

**webERP** — *www.weberp.org/*
*Products:* webERP

**Webmin** — *www.webmin.com/*
*Products:* Webmin

**WordPress** — *wordpress.org/*
*Products:* WordPress

**XRMS** — *xrms.sourceforge.net*
*Products:* XRMS

**xt:Commerce** — *www.xt-commerce.com/*
*Products:* xt:Commerce

**ZOPE** — *www.zope.org/*
*Products:* ZOPE

# Annex D: Glossary of Acronyms

## Annex D: Glossary of Acronyms and Main Definitions

**BDS license: Berkeley Software Distribution license.**

**CAGR: Compound Annual Growth Rate.**

**Computer hardware**. According to the EITO 2007 definition, it includes server systems, personal computers, printers and multifunctional peripherals, workstations and other add-ons.

**CRM: Customer Relationship Management systems.** According to the eBusiness W@tch 2006 definition, they refer to a broad range of methodologies and software applications that provide a company with the ability to systematically increase knowledge about its customers and their buying behaviour, and to build and adapt marketing strategies on the basis of this intelligence.

**DRM: Digital Rights Management.**

**EBCI: eBusiness Competence Index.**

**EBusiness: Electronic Business.** According to the OECD definition, it concerns automated business processes (both intra- and inter-firm) over computer mediated networks.

**EBW : eBusiness W@tch.**

**ECommerce: Electronic Commerce.** According to the OECD definition, it concerns the sale or purchase of goods or services, whether between businesses, households, individuals, governments and other public or private organisations, conducted over computer-mediated networks.

**EITO: European Information Technologies Observatory.**

**EMEA: Europe, Middle East, and Africa.**

**ERP: Enterprise Resource Planning systems.** According to the eBusiness W@tch 2006 definition, they are software systems that help to integrate and cover all major business activities within a company, including product planning, parts purchasing, inventory management, order tracking, human resources, project management and finance. Ideally, they link business processes electronically across different business functions and thus help to improve efficiency in operating those processes. In addition, ERP systems can play an important role in supporting connectivity between enterprises.

# Annex D

**Freeware software.** It refers to software which its creator allows the general public to use and distribute (more or less) freely.

**FSF: Free Software Foundation.**

**GDP: Gross Domestic Product.**

**GNU: GNU is Not Unix.**

**GPL: General Public license.**

**GUI: Graphic User Interface.**

**ICT: Information and Communications Technologies.** According to the EITO 2007 definition, it refers to Information Technologies plus Telecommunications equipment and Telecommunication services.

**IP: Internet Protocol.**

**ISV: Independent Software Vendor.**

**IT services.** According to the EITO 2007 definition, they include professional services (consulting, implementation and operations management services) ans support services.

**IT: Information Technologies**. According to the EITO 2007 definition, it refers to the combined industries of hardware for office machines, data processing equipment, data communications equipment (including LAN hardware, packet switching and routing equipment and other data communications equipment), software and services.

**LAN: Local Area Network.**

**LEs: Large Enterprises.** According to the European Commission definition, this category encompasses all the enterprises which employ more than 250 persons and which have either an annual turnover exceeding 50 million euro or an annual balance sheet total exceeding 43 million euro. In this report we refer only to the employment dimension.

**LGPL: Lesser GNU General Public License.**

**Office equipment.** According to the EITO 2007 definition, it includes copiers, typewriters, calculators, duplicating equipment, cash registers, point-of-sale systems, document filing and other products (such as those for labelling, franking, addressing, mail handling).

**OSI: Open Source Initiative.**

**OSS: Open Source Systems/Solutions/Software.**

**RFID: Radio Frequency Identification.**

**SaaS: Software as a Service.**

**SCM: Supply Chain Management systems.** According to the eBusiness W@tch 2006 definition, they are software which helps companies to match supply and demand through integrated and collaborative interaction tools. SCM provides an oversight of the flows of products/materials, information and finances, as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer. SCM coordinates and integrates these flows both within and among companies. One of the key objectives of any effective SCM system is to reduce inventory (on the assumption that products are available when needed).

**Shareware software.** It refers to a distribution model for regular commercial software. The idea is to let potential users test the – fully functional – software before they make a decision to buy it or not.

**SI: Systems Integrator.**

**SMB: Small Medium Business.**

**SMEs: Small and Medium-sized Enterprises.** According to the European Commission definition, this category encompasses all the enterprises which employ fewer than 250 persons and which have either an annual turnover not exceeding 50 million euro, or an annual balance sheet total not exceeding 43 million euro. In this report we refer only to the employment dimension.

**SOA: Service-Oriented Architecture.**

**Software products.** According to the EITO 2007 definition, they are commercially available package programmes for sale or lease from systems services and Independent Software Vendors (ISVs). They include system software (system infrastructure software and applications tools) and application software.

**STG: System and Technology Group.**

**TLC: Telecommunications**. According to the EITO 2007 definition, it refers to carrier services, end user communications equipment, private branch exchange and key systems, circuit switching equipment, cellular mobile radio infrastructure, transmission and other network equipment.

**VAP: Value-Added Provider.**

**VAR: Value-Added Reseller.**

**VOIP: Voice Over IP.**

**VPN: Virtual Private Network.**

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