

Christian Tanner, Ralf Wölfle, Michael Quade

# The role of information technology in procurement in the Top 200 companies in Switzerland



Sponsors







with their system partner







#### **Impressum**

The role of information technology in procurement in the Top 200 companies in Switzerland

The study was carried out by the Competence Center E-Business Basel at the University of Applied Sciences Northwestern Switzerland – FHNW.

#### Authors

Christian Tanner, Ralf Wölfle, Michael Quade

#### **Translation into English**

Margaret Oertig-Davidson

#### **Publisher and source for references**

University of Applied Sciences Northwestern Switzerland – FHNW School of Business
Competence Center for E-Business Basel
Peter Merian-Strasse 86, P.O. Box
CH-4002 Basel

www.b2b-forum.ch www.fhnw.ch/wirtschaft/iab

#### Graphic design and production

Netzmedien AG, CH-4002 Basel

#### Printed by

Reinhardt-Druck AG, CH-4055 Basel

#### Copyright

© 2006 FHNW

All rights reserved. Quotes and extracts from this study may only be published by third parties if the source is acknowledged.



Christian Tanner, Ralf Wölfle, Michael Quade

# The role of information technology in procurement in the Top 200 companies in Switzerland

Competence Center E-Business Basel
School of Business
University of Applied Sciences Northwestern Switzerland – FHNW
www.b2b-forum.ch
www.fhnw.ch/wirtschaft/iab

## **Foreword and Acknowledgments**

E-procurement, the aspect of e-business which addresses the relationships and processes of a business with its suppliers, was a hot topic for several years. Online marketplaces and reverse auctions were the main focus of interest. Now the euphoria surrounding e-business has abated, there is also less talk about e-procurement. What is the role of information technology in the procurement function of large companies in Switzerland today? The study at hand addresses this question.

The topic of B2B-e-commerce has been the main focus of the Competence Center for E-Business in Basel since 2001. The Competence Center is part of the School of Business at the University of Applied Sciences Northwestern Switzerland and fulfils the mandate of conducting applied research and development as well as providing consulting services to industry in the area of e-business. This allows a connection to be made between research and services, so that the Competence Center can counteract the status quo in relevant e-business topics and make a contribution to addressing current problem areas and contributing to their solutions. Typical elements of this task include making a systematic description delineating the field, the search for and reflection on solution scenarios, the description of best practices in the form of case studies and the development of guidelines to support action.

In 2003 the Competence Center for E-Business of Basel carried out an e-procurement study on a small scale [Tanner 2003]. It was embedded in the E-Supplier Initiative and showed the need for action in the area of electronic invoice exchange. The Competence Center subsequently launched the initiative swissDIGIN. This more broadly-based study aims to capture the current status of market development, identify progress and identify current topics requiring action for future research and services projects. In this study, data has been collected on the behaviour of major companies who have shown in the past that they set the tone for the whole market, authoritatively defining for small and medium enterprises both the rules of the game and the instruments to be used.

The study could not have been carried out and published without the support of our sponsors itelligence, ESPRiT Consulting and HP Consulting Services for SAP. A significant financial contribution was also made by the research pool of the University of Applied Sciences of Basel. The Swiss Procurement Forum (SVME) and the Netzwoche supported us in our communication goals. The knowledge gathered in the study was provided by representatives from 68 companies and it was their willingness to fill in the questionnaire, and in many cases to give additional interviews, that made a successful conclusion possible. We thank all our partners sincerely for their contributions.

Lastly we would like to thank our colleagues at the Institute for Business Economics who supported us in various ways. We are grateful to Prof. Petra Schubert und Prof. Walter Dettling for their support in carrying out the study and for creating the conditions required in order to do so.

Basel, March 2006 Christian Tanner, Ralf Wölfle, Michael Quade

## **Management summary**

The procurement organisation can significantly influence the success of a company. These days it operates in a dynamic, complex environment and in order to operate efficiently and effectively it has to create appropriate structures and make use of suitable instruments. Information technology can play an important role in this.

#### Goals of the study

The study "The role of information technology in the procurement in the Top 200 companies in Switzerland" was designed and carried out by the Competence Center E-Business Basel of the University of Applied Sciences Northwestern Switzerland. It pursues the following three main goals:

- Providing an overview of the significance and current status of the use of information technology in procurement.
- Identification of challenges in the use of IT for procurement,
- Locating priorities in the further development of IT for procurement.

The study addresses decision makers in organisations who are affected in some way by IT solutions in procurement and aims to offer them orientation for the conception and further development of solutions. In addition, it should provide research and teaching faculties with up-to-date insight into the market.

#### **Study participants**

The questionnaire was sent to procurement heads in the 200 companies which according to the Handelszeitung publication "Top 2004 – the largest companies in Switzerland" are the largest employers in Switzerland.

The online data collection was carried out between 2 and 30 November 2005.68 companies in total took part in the study. This represents returns of 34%. The study participants were mainly procurement managers in companies from different sectors. Most of them employed more than 1000 staff in Switzerland.

#### Results

#### Current use of IT in procurement

The most important general procurement goal set by the companies examined is the reduction of the purchasing price and the total cost of procurement. Great importance is also attached to internal process optimisation.

The highest priority for most of the companies in the use of information technology is for central coordination and demand aggregation (50.8%). The priority of IT should be to provide support in the creation of process efficiency and cost / expenditure transparency as well as achieving reductions in the purchasing price. For more than three quarters of the study participants (78.2%) IT makes an important contribution to successfully carrying out the procurement function. In addition, expectations of the instruments used are almost all met for a large proportion of the procurement organisations.

The companies have made substantial investments in their IT infrastructure in the last five years; over a million CHF in the case of nearly a quarter of the respondents. The main focus lay in the optimisation of the materials management system

(66.0%), in the improvement of the reporting function (60.0%) and in electronic invoice processing (54.0%). Project goals were achieved completely for 26.0% of the companies while the others had to accept compromises in terms of costs, scope or the planned time frame.

The inquiry shows that the modern instruments of e-procurement and Supplier Relationship Management are only used consistently by a minority. Only the materials management module shows a consistently high degree of use (67.2%). Online-tools for catalogue based procurement, for invitations to tender or purchasing auctions and for integrated supplier cooperation are used only rarely or occasionally in comparison. There is also still potential for use of instruments for contract management and supplier evaluation.

#### Challenges in the utilisation of IT

The high introduction costs for new solutions often stand in the way of efforts for further development. 61.3% of the study participants describe this as a challenge, often coupled with the difficulty of estimating benefit and potential of new solutions (48.4%). A further hurdle for a consistent and integrated roll-out of IT solutions is the slow link-up of suppliers to the procurement system (54.8%). Alongside this, poor master data quality is one of the main difficulties in the use of IT for 51.6% of the companies.

#### Further development of IT in procurement

The procurement organisations are not satisfied with what has been achieved, and wish to take advantage of further potential for optimisation. The majority of responding companies plan to spend more than 100,000 CHF per year on further development in IT in the next two years. Major projects costing millions tend to be the exception. The focus of activities for further development in strategic procurement processes are the analysis of expenditure and the supplier evaluation. In the area of operative processes the order processing of direct and indirect goods as well as services have priority. In 68.8 % of the companies development of electronic invoice entry processing is given very high or fairly high priority.

Supplier Relationship Management and e-invoicing are top of the list of topics for the future. All other topics also refer to issues beyond the own organisation. If all players in the market wished to develop these solutions individually, we would have to wait for a long time for substantial progress. However a two-thirds majority of the companies are ready to tackle the major challenges like supplier integration together with other procurement organisations and partners.

## **Table of contents**

Fo	reword and Acknowledgments	2
Ма	nagement summary	3 5 6 6 6 7 10 11 11 11 14 16 17 17 17 18 19 20 20 22 22 22 22 22 23 24 25 26 27 28 29 20 30 30 30 30 30 30 30 30 30 3
Lis	t of figures and tables	5
1	Introduction	
	Starting point	
	Approach	
	Response and characterisation of the participants	
	Terminology	
2	Procurement situation	11
2.1	Main goals in procurement	11
2.2	Top priorities according to sector	11
2.3	The company's procurement volume	14
3	Current use of information technology in procurement	
	The contribution of IT to success is generally recognised	
	IT for centralized steering of processes and demand	
	Majority has invested substantially in the development of IT	
	Main focus of development projects in the last five years	
	Few IT tools are used consistently	
	SAP is predominant in procurement departments	
3.7	Overall satisfaction with the IT tools used	20
4	Electronic Data Interchange with suppliers	22
4.1	Few companies with high electronic volume	22
4.2	Greatest volume with electronic orders and invoices	22
	Fully integrated solutions predominant	
4.4	Lack of supplier involvement and balanced B2B solution scenarios	23
5	IT support in services procurement	
	Record and evaluation of services rendered could be more efficient	
	Process support by means of IT lags behind reported efficiency	
5.3	Greater need for development in operative processes	27
	Challenges in the utilisation of IT for procurement	
	High costs, few suppliers and deficient master data	
6.2	Tackling the greatest challenges together	29
7	Further development of the use of IT in procurement	
	Procurement managers at the helm	
	Strategic level: Optimisation of transparency and reporting in focus	
	Operative level: Optimisation of order and invoice processing in focus	
	Investment in optimisation and less in major projects	
7.5	Hot topics: SRM and e-invoicing	32
<b>8</b>	Conclusions: Progress on the spot as procurement trims up	
	Procurement goals remain stable	
	All involved parties are called upon to act	
۵IL	lliography	50

## List of figures and tables

Figure 1:	Number of employees in Switzerland, calculated as full-time equivalents	7
Figure 2:	Sector affiliation of the participating companies	8
Figure 3:	Job function of the respondents	9
Figure 4:	Procurement goals and their priority	11
Figure 5:	Goals with very high priority, broken down by sector	12
Figure 6:	Procurement volume as a percentage of company's total turnover	14
Figure 7:	Direct goods as a percentage of total procurement volume	14
Figure 8:	Contribution of IT to carrying out the procurement function successfully	16
Figure 9:	Priority of goals in using IT for procurement	17
Figure 10:	Total expenditure on projects to develop IT for procurement from 2001 to 2005	17
Figure 11:	Main focus of projects to develop IT for procurement from 2001 to 2005	18
Figure 12:	Overall, were all goals achieved in the projects mentioned, with regard to scope, time and costs?	19
Figure 13:	IT tools used for procurement	19
Figure 14:	IT solutions used for operative order processing	21
Figure 15:	How well do the IT tools used for procurement fulfil your expectations?	21
Figure 16:	Number of suppliers with whom business documents were exchanged by means of EDI/WebEDI	22
Figure 17:	Methods by which electronic business documents are exchanged with suppliers	23
Figure 18:	To what extent do you agree with the following statements?	23
Figure 19:	Purchased services as a percentage of total procurement volume	24
Figure 20:	Process efficiency in services procurement	24
Figure 21:	Process support of services procurement with IT tools	25
Figure 22:	Services which are mainly procured with the support of IT tools	25
Figure 23:	Need for greater support of services procurement with IT tools	26
Figure 24:	Main difficulties when using IT for procurement	28
Figure 25:	Would your company be prepared to seek solutions alongside other procurement organisations and partners	
	with regard to the greatest challenges?	29
Figure 26:	Who drives the key developments in the use of IT for procurement?	30
Figure 27:	Further development of IT to support strategic procurement processes	31
Figure 28:	Further development of IT to support operative procurement processes	31
Figure 29:	Estimated annual expenditure for the further development of IT for procurement for the years 2006 and 2007	32
Figure 30:	Importance of topics for the company in the coming years	32
Figure 31:	Functional chain of optimisation in procurement	34
Table 1:	Sector distribution in comparison with Federal Industry Census 2001	8

### 1 Introduction

Procurement plays a major role in manufacturing and trade, which can significantly influence a company's success. As a core function it is, however, subjected to the mega trends of the market. Its day to day existence is very much defined by growing procurement volumes due to greater concentration of business on core competences, globalisation of procurement markets, growing market dynamics as well as the ever shorter product lifecycle.

For a procurement organisation to operate both efficiently and effectively in such a complex environment useful structures need to be created and suitable instruments put to use. Information technology can have an important function in this regard. Used appropriately it can offer:

- · smoother and faster process flow,
- · efficient distribution of information,
- · decentralisation of tasks and decisions,
- increased transparency and better control,
   In addition, information technology helps not only to support internal processes, but also those involving business partners.

In this way information technology grows in importance in the daily business of procurement managers. This study aims to show the role of IT in carrying out the procurement function in the Top 200 companies in Switzerland. In particular we are interested in finding out which processes are supported by IT and to what extent, where the greatest challenges lie and where there is potential for further development.

#### 1.1 Starting point

The Competence Center E-Business Basel (CCEB) of the University of Applied Sciences Northwestern Switzerland has gathered data and written case studies over the years in the subject area of e-business and carries out research projects and consulting services in close cooperation with partners in industry.

A main focus of the Competence Center is the optimisation of business-to-business relations and the related processes by means of electronic media. The initiatives E-Supplier und swissDIGIN were carried out by CCEB in this context. Many procurement organisations who took part in the swissDIGIN-Forum expressed interest in increased clarity regarding the status of use of information technology in internal and external processes. This was due to the fact that the potential which was demonstrated by solution providers and which was comprehensible on a rational level, was often not tapped to a satisfactory degree.

With the study at hand the CCEB aims to meet this need of the procurement organisations. The Top 200 companies were chosen for investigation because, as a rule, it is major companies who drive innovation and adopt new solutions first in the field of information technology.

#### 1.2 Aims of the study

Based on the situation described above, the study, "The role of information technology in the procurement in the Top 200 companies in Switzerland" has set the following objectives:

- Describing the significance and the current status of the use of information technology in procurement.
- Identification of the challenges involved in using IT in procurement.
- Identifying priorities in the further development of IT for procurement.

Two topics are covered in depth, in the topic areas "Electronic Data Interchange with suppliers" and "IT support in services procurement«.

The category "Success Story" provides a succinct portrayal of successful IT solutions in procurement. These originate from companies who by their own account have fully achieved their goals in their IT projects over the last years.

The study is intended for decision makers in organisations who are in any way affected by IT solutions in procurement, which includes:

- · Procurement organisations
- Suppliers
- IT solution vendors
- · Service providers and consultants.

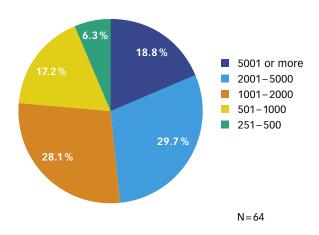
However the study should also provide up-to-date insights into the market for research and teaching purposes.

#### 1.3 Approach

The basic study sample consists of the 200 privately owned companies who, according to the Handelszeitung publication "Top 2004 – the largest companies in Switzerland" are the major employers in Switzerland. The company names are taken from the corresponding Handelszeitung database. In this comprehensive survey we wrote personally to the people in charge of procurement in the various companies or groups. The questionnaire, which was agreed on with the sponsors of the study, was sent out in German and English.

The online survey was carried out between 2 and 30 November 2005. Following this, the results were evaluated and processed by the Competence Center E-Business Basel. The assessment and conclusions may differ from those expected by the sponsors.

Figure 1: Number of employees in Switzerland, calculated as full-time equivalents



## 1.4 Response and characterisation of the participants

68 companies in total took part in the study, resulting in a return rate of 34%. Four of the questionnaires had to be discarded. They had been completed by small group companies whose procurement function did not demonstrate the characteristics of a large company and did not play a major role within the group.

The study draws a comprehensive picture of the situation and evaluation of the 200 biggest companies regarding the role of IT in procurement. The participants in the study will be broken down by the size of their company, the sector they are in as well as their procurement volume and job function.

#### **Company size**

Of the participating companies, 76.6% employed over 1000 staff (calculated as full time equivalents). Companies with less than 500 employees were subsidiaries of groups of companies who were either responsible for most of the company's purchasing or else had the highest procurement volume in the group. In total, 28% of the respondents indicated that they were answering from the perspective of a subsidiary. The remainder answered the question from the perspective of the procurement organisation of an independent company, or from the perspective of the corporate group.

Anzeige



analysis and controlling							
supply balanced scorecard	evaluation and controlling of suppliers	reporting					
management of the product and supplier base	sourcing	operative procurement					
product portfolio management, pooling of demand	bid invitations / auctions (RFI, RFQ, RFx)	electronic procurement					
management of the supplier base	contract management						
supplier integration							
supplier portals (collaboration, self service)	catalog management	electronic data interchange					

ESPRiT service portfolio: supplier relationship management

ESPRIT Consulting is an international consulting firm that specializes in a combination of management consultancy and consultancy for IT. Thus ESPRIT is able to offer a complete range of business solutions to problems that occur anywhere along the value chain.

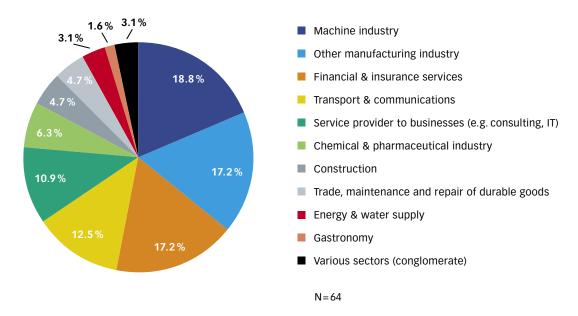
We support you all the way, as the efficiency of your procurement is improved and potential benefits are realized. To implement effective supplier relationship management, we offer approved tools that work in practice, not just in theory.

Our consultants develop strategies that can easily be put into fully-functioning solutions. Our goal is your success, and it's a goal we love to achieve. Well-known customers such as Lonza, the Max Planck Society, the Swiss Federal Railways, the Swiss Post, Siemens, Swisscom and Thomas Cook already trust in our expertise.

contact: thomas.muenger@esprit-consulting.com



Figure 2: Sector affiliation of the participating companies



#### **Sector affiliation**

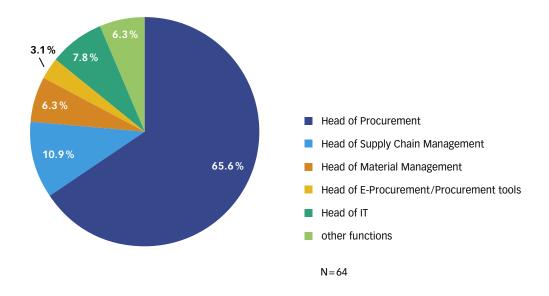
Figure 2 shows the distribution of participating companies according to sector. A comparison with the distribution of all companies with more than 500 employees is provided in

a separate table, taken from the Federal Industry Census of the Department of Statistics of 2001. It can be observed that commerce is underrepresented in the study while the machine industry is overrepresented.

Table 1: Sector distribution in comparison with Federal Industry Census of 2001

Sector	Participants in the study	Industry census 2001
Machine industry	18.8%	8.3%
Other manufacturing industry	17.2%	21.8%
Financial & insurance services	17.2%	16.4%
Transport & communications	12.5%	9.9%
Service provider to businesses (e.g. consulting, IT)	10.9%	9.4%
Chemical & pharmaceutical industry	6.3%	6.0%
Construction	4.7 %	4.2%
Trade, maintenance and repair of durable goods	4.7 %	18.4%
Energy- & water supply	3.1%	2.3%
Gastronomy	1.6%	3.4%
Various sectors (conglomerate)	3.1%	
Total	100.0%	100.0%

Figure 3: Job function of the respondents



#### Job function of the respondents

85.9% of the responses were provided by people with a leading function in the procurement organisation. In five cases the questionnaire was filled in by respondents who were in charge

of IT and in a further four cases, by respondents who had a supporting role in procurement.

#### **Success-Story**



#### Stronger focus due to outsourcing of the electronic purchasing catalogue

Since May 2005 UBS has had its purchasing catalogue run by an external service provider. The new solution had to be capable of integration into the existing system as well as relieving both UBS and the suppliers of both costs and effort. In addition, the catalogue data maintenance was to be optimised. The choice of Heiler Software was made, a content provider who, in addition to classic catalogue services provides complete support services from hosting to system infrastructure. On top of this, Heiler is a point of contact for suppliers. They build their initial catalogues and catalogue updates with the content provider. These are then checked and authorised by UBS.

Today, around 4,300 employees at UBS in Switzerland order products from a multi-supplier catalogue. This is made up of a total of 36 suppliers' catalogues, supplemented by articles from the UBS internal system and its warehouse articles, the current stock of which is constantly displayed.

The outsourcing of the catalogue and content management to a third party provider has had a positive effect. Software, infrastructure and managed services from the same source relieve the procurement function of administrative tasks and allow for greater concentration on the core business.

Rudiguer Marbé, Head of Procurement, UBS Ltd., Zurich

#### 1.5 Terminology

In order to ensure the shared understanding of the terminology used, terms often used in relation to classification of goods and information technology are explained.

#### **Classification of goods**

**Direct goods:** Material goods which flow directly into the production processes of the company (raw materials, partially-/ finished products, merchandise, etc.).

**Indirect goods:** Material goods which are used to carry out the work processes of the company (working materials, office supplies, tools, products used for maintenance, etc.).

**Services:** External services required by the company in order to carry out work processes (consulting, advertising, maintenance, travel services, temporary work, etc)

**Investment goods:** Capital goods which the company needs in order to carry out work processes.

#### **Information technology terms**

**Business Software:** Umbrella term for all kinds of software in use in business. It includes ERP systems as well as e-business software.

**E-Business:** Support of relationships and processes of a company with its business partners, customers and employees by electronic means.

**E-Procurement:** Support of a company's relationships and processes with its suppliers by electronic means.

**Electronic Data Interchange (EDI):** Completely automatic exchange of structured information between the IT systems of two different institutions.

**Information technology (IT):** All hardware, software and networks used in the company.

Radio Frequency Identification (RFID): A radio identification system that reads and saves data using a transponder without physical or visual contact. The transponder can be attached to objects which can be identified by the data saved on them.

**Supplier Relationship Management (SRM):** Concept for comprehensive support of relationships and processes with suppliers.

**Supply Chain Management (SCM):** Integrated management of the complete value chain from purchasing via processing, selling, disposal to recycling.

**WebEDI - Web Electronic Data Interchange:** Procedure to receive or send structured messages via a web based interface (browser) to connect business partners who have no EDI infrastructure.

#### **Further terms**

**Business-to-Business (B2B):** Relationship between two companies as business partners.

### 2 Procurement situation

Before the use and role of IT in procurement can be examined, the procurement situation of the study participants should be highlighted. The main emphasis in the utilisation of IT in procurement is very much dependent on the procurement objectives, the particular field and the core business. The latter two criteria influence to a large extent the volume of procurement and the requirements of a company.

#### 2.1 Main goals in procurement

Reduction of purchase prices is the top priority when goal-setting in procurement. This classical goal is given very high priority, with 56.3% of responses. The broad objective of optimising the total costs of procurement is, with the exception of four companies, ranked as rather high or very high priority. The internal optimisation of processes plays an important role in this. 48.4% of participants grant it very high priority and here they seem to identify untapped potential. In contrast, B2B process optimisation was only given high priority by 17.2%.

Outsourcing of strategic or operative processes did not seem to be an important issue from the procurement perspective.

#### 2.2 Top priorities according to sector

Because the sector affiliation has a substantial influence on the procurement aims, the diagrams in Figure 5 demonstrate which goals are classified as highest priority by which proportion of the representatives of the respective sector. The five areas

which participated most fully in the study serve as a starting point. For this reason, companies from the chemical and pharmaceutical industries are combined with representatives from the remaining industries (see Figure 2).

In this more detailed examination it is noticeable that the goal of increasing cost transparency is clearly less prioritised in the manufacturing industries as compared to the service companies. The reduction in the number of suppliers also has higher priority in the service industry. The further goals show a majority of characteristics typical of the sector.

Figure 4: Procurement goals and their priority

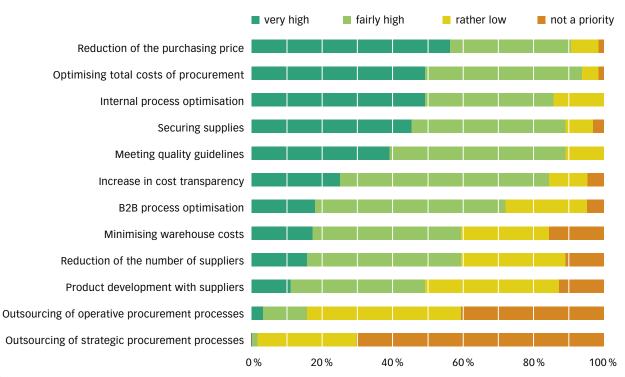


Figure 5: Goals with very high priority, broken down by sector

#### **Reduction of the purchasing price** Machine industry (N=12) 83.3% Chemical, pharmaceutical, other industry (N=15) 66.7% Financial & insurance industry (N=11) 54.5% Transport & communications (N=8) 50.0% Service provider to businesses (e.g. consulting, IT) (N=7) 28.6% **Optimising total costs of procurement** Machine industry (N=12) 58.3% Chemical, pharmaceutical, other industry (N=15) 40.0% Financial & insurance industry (N=11) 54.5% Transport & communications (N=8) 50.0% Service provider to businesses (e.g. consulting, IT) (N=7) 42.9% **Internal process optimisation** Machine industry (N=12) 33.3% Chemical, pharmaceutical, other industry (N=15) 46.7% Financial & insurance industry (N=11) 63.6% Transport & communications (N=8) 37.5% Service provider to businesses (e.g. consulting, IT) (N=7) 28.6% **Securing supplies** Machine industry (N=12) 75.0% Chemical, pharmaceutical, other industry (N=15) 53.3% Financial & insurance industry (N=11) 18.2% Transport & communications (N=8) 37.5% Service provider to businesses (e.g. consulting, IT) (N=7) **Maintaining quality guidelines** Machine industry (N=12) **75.0**% Chemical, pharmaceutical, other industry (N=15) 40.0%

18.2%

12.5%

14.3%

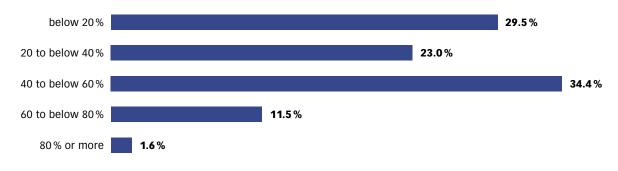
Financial & insurance industry (N=11)

Service provider to businesses (e.g. consulting, IT) (N=7)

Transport & communications (N=8)

#### Increase in cost transparency Machine industry (N=12) 8.3% Chemical, pharmaceutical, other industry (N=15) 6.7 % Financial & insurance industry (N=11) 45.5% Transport & communications (N=8) Service provider to businesses (e.g. consulting, IT) (N=7) **B2B** process optimisation Machine industry (N=12) 25.0% Chemical, pharmaceutical, other industry (N=15) 13.3 % Financial & insurance industry (N=11) 27.3% Transport & communications (N=8) 0.0% Service provider to businesses (e.g. consulting, IT) (N=7) 14.3% **Minimising warehouse costs** Machine industry (N=12) 8.3% Chemical, pharmaceutical, other industry (N=15) 33.3% Financial & insurance industry (N=11) 9.1% Transport & communications (N=8) 37.5% Service provider to businesses (e.g. consulting, IT) (N=7) 0.0% Reduction in the number of suppliers Machine industry (N=12) 25.0% Chemical, pharmaceutical, other industry (N=15) 6.7% Financial & insurance industry (N=11) 18.2% Transport & communications (N=8) 0.0% Service provider to businesses (e.g. consulting, IT) (N=7) 42.9% **Product development with suppliers** Machine industry (N=12) 25.0% Chemical, pharmaceutical, other industry (N=15) 6.7% Financial & insurance industry (N=11) 0.0% Transport & communications (N=8) 0.0% Service provider to businesses (e.g. consulting, IT) (N=7) 28.6%

Figure 6: Procurement volume as a percentage of company's total turnover



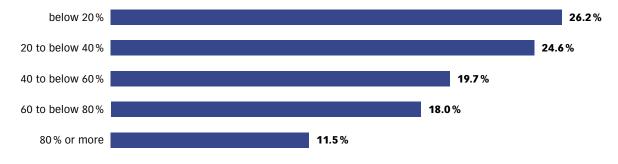
N=61

#### 2.3 The company's procurement volume

The average proportion of the procurement volume relative to the total turnover in the responding companies is 36.6%. 29.5% of the companies report that their procurement volume makes up less than 20% of the turnover, with mostly the service industries in this category. Of the 47.1% of answers in which the procurement volume makes up more than 40% of the total turnover, most are manufacturing and trading companies.

11.5% of the companies reported that direct goods comprise 80% of their procurement volume. These are primarily trading and manufacturing establishments. Most service providers reported a proportion of less than 20%. The average proportion of direct goods from procurement volume across all the responding companies amounts to 42.8%.

Figure 7: Direct goods as a percentage of total procurement volume



N=61

#### **Success Story**



#### Central coordination of decentralised, heterogeneous order processes

Maintenance and repair play an important role in the smooth running of an airport. The Corporate Supply Management of Unique (Airport Zurich Ltd.) was given the task of coordinating heterogeneous procurement for this area and putting it on a common platform.

The first step was to redefine the processes and document them in a handbook. Then they were mapped to the SAP modules plant maintenance and materials management. Central strategic procurement provides the basis for direct orders. It provides negotiated framework agreements for the key suppliers and maintains relationships to further 800 suppliers who are also regularly considered. Central operative procurement bears the responsibility for the supply logistics of the central materials warehouse and also for the procurement of special parts. In addition, it offers system support for decentralised purchasing points. There are over 100 purchasers from various areas and sections of the company and these were given special consideration in the development of the solution. They carry out purchasing activities in addition to their normal tasks. Our SAP Competence Center developed system-based activities for them with simplified screen templates, enhanced search aids and leaner approval processes. This allows the purchaser to order directly from predefined, approved suppliers with a few mouse clicks.

Since the introduction of this infrastructure, company-wide synergies have been utilised in procurement and the parties involved benefit from simplified and standardised follow-on processes and a significantly shortened lead time.

Hanspeter Müller, Head of Corporate Supply Management, Unique (Airport Zurich Ltd.)

# 3 Current use of information technology in procurement

This chapter describes where procurement organisations stand with regard to use of information technology. Of particular interest is the contribution IT can make to carrying out the procurement function successfully and what aims are pursued in doing so. Before we examine which processes are supported by information technology to what degree, we show how much the companies have invested in the last five years and in what measures and projects.

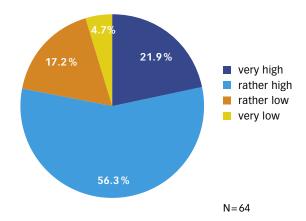
## 3.1 The contribution of IT to success is generally recognised

The potential of information technology is realised through its integrated use in the various core and support functions of an organisation as well as with external business partners. It is therefore ideal if an IT strategy exists that can provide orientation for both the procurement organisation and for the further development of IT. 23.4% of the study participants admit that such a strategy does not exist.

More than three quarters of the participants reported that information technology makes a very significant or fairly significant contribution to carrying out the procurement function successfully. This seems to provide a good foundation

for its use in assisting further developments in most procurement organisations. There is no uniform picture of either the sector or the procurement volume of companies whose contribution is estimated as rather low or very low.

Figure 8: Contribution of IT to carrying out the procurement function successfully



#### **Success Story**



#### Fully-fledged electronic procure-to-pay cycle implemented

As an internal service provider, the department of Purchasing and Logistics at Swisscom Fixnet is always on the look out for optimisation potential in the procurement process. In the case of strategic suppliers of direct goods with adequate standardisation levels, the implementation of electronic solutions is regularly evaluated.

The first completely electronic order processing for direct goods was implemented in April 2005 with the supplier Alcatel. Since then, orders, delivery confirmations and invoices for the procurement of ADSL-net infrastructure have been exchanged completely paperless. This electronic invoice processing meets the specifications of the VAT authorities, a basic requirement for the waiving of the paper invoice and for the enforcement of input tax deduction. The functions to be supplied by Alcatel, mostly a combination of products and services, are specified in a comprehensive agreement. This forms the framework for the specifications and the orders, which are activated in SAP MM-Module and then transmitted through the transaction platform Conextrade to Alcatel. The XML standard from RosettaNet is used for this. As soon as the service is accepted by Alcatel, a delivery confirmation and, subsequently, an invoice to Swisscom Fixnet are transmitted by the same path. The latter is automatically reconciled in SAP MM-Module and finally approved for payment.

This solution was implemented one month before the planned date and had already paid for itself after only six months. Due to the electronic processing of around 9,000 order items annually, Alcatel and Swisscom Fixnet can achieve recurring savings. In addition, process quality has been improved through standardisation.

Bernhard Senn, Head of Purchasing & Logistics, Swisscom Fixnet

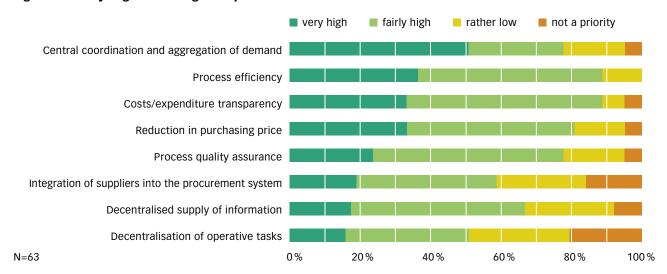


Figure 9: Priority of goals in using IT for procurement

## 3.2 IT for centralized steering of processes and demand

The goal of coordinating processes centrally and aggregating demand by means of information technology is at the top of the list of priorities (Figure 9). Over 50 % of companies gave very high priority to this goal. Great significance is also attached to process efficiency and creating transparency of costs and expenditure. If the companies who give these goals fairly high priority are added, they are supported by almost 90 % of the companies.

Whereas the reduction of the purchasing price is clearly at the top of the list of the general procurement goals (see Figure 4), it is much less strongly prioritised with regard to the use of information technology.

The aim of integrating suppliers into the procurement system is pursued by  $19\,\%$  as a very high priority. Relatively few companies seem to want to stress the potential of integrated

B2B processes. If this response is analysed in terms of sector affiliation, it does not show a unified picture. The companies come from different sectors and are in common leading companies in their sectors.

The decentralisation of operative tasks was given very high priority by less than 16% of the companies. These were mainly companies with a strong network of subsidiaries and production plants.

## 3.3 Majority has invested substantially in the development of IT

Only two companies reported having had no expenditure on further development of IT for procurement in the last five years (Figure 10). A further 26.7% reported only a sum of up to 100,000 CHF. The cited reasons for this reticence provided by the companies with expenditure of less than 100,000 CHF were:

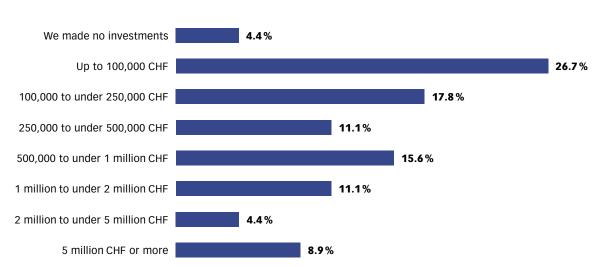


Figure 10: Total expenditure on projects to develop IT for procurement from 2001 to 2005

- The existing system covered our essential procurement needs (9 mentions).
- We had no IT strategy for procurement (5 mentions).
- Procurement has no strategic significance in the company (3 mentions).
- The use of IT for procurement was of secondary priority from the company's perspective (2 mentions).
- Our procurement processes have not yet been developed (2 mentions).
- We have insufficient personnel resources (1 mention).

Almost a quarter of the companies have invested over a million CHF in the further development of IT for procurement in the last five years. The largest proportion of the expenditure reported for developments of IT done ranged from 100,000 CHF to 1 million CHF.

## 3.4 Main focus of development projects in the last five years

Two thirds of the companies invested in the introduction of a new material management system or in the optimisation of an existing one. 60% invested in the improvement of reporting and creation of improved expenditure transparency. In this way, consolidation and optimisation of functions were in the foreground of project activities (Figure 11).

54% of respondents also reported further developments in electronic invoice entry processing. This answer comprises optimisation of internal and inter-company processes with suppliers. Projects with suppliers for the introduction or improvement of Electronic Data Interchange of business documents were carried out by 42% of the companies.

The procurement of goods via electronic catalogues was a main focus of further development of IT for  $40\,\%$  of the participants.

Almost a third of the companies has linked-up with B2B marketplaces or transaction platforms or has optimised these connections. The same number of companies report projects in the area of online invitations to tender and online auctions.

The lowest value was given to the optimisation of services procurement, which was only mentioned as a main focus by 26% of the companies.

In view of these activities for further development, it is also interesting to examine whether the project goals were reached in terms of scope, time and costs. 26% of the companies confirmed this unreservedly, while 38% did not achieve their goals within the planned time frame (Figure 12). A further 24% of the respondents reported having made compromises in terms of project scope. The planned project costs were exceeded by 16% of the companies. Two companies answered the question with a definite 'no'.

Fully achieving goals seems to be the exception in projects for the further development of IT for procurement. The following success factors were reported by respondents who fully achieved their project goals:

- · Management support
- · Good project management
- · Thorough prior process definition
- Early involvement of partners
- · Clear solution and performance specifications
- · Communication and training

Figure 11: Main focus of projects to develop IT for procurement from 2001 to 2005

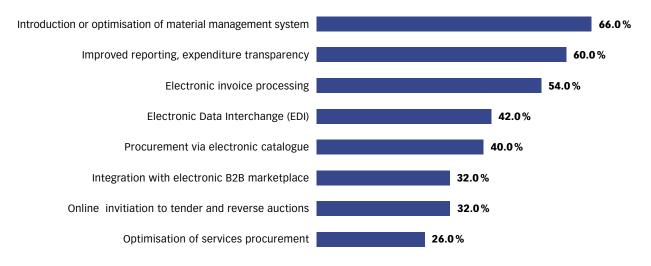
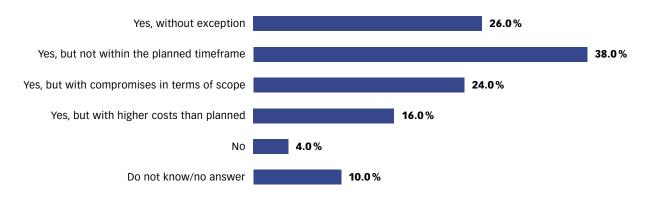


Figure 12: Overall, were all goals achieved in the projects mentioned, with regard to scope, time and costs?



N = 50

#### 3.5 Few IT tools are used consistently

With the knowledge that information technology is used in procurement to fulfil the central functions, it is of interest to know which actual tools are used, and to what extent. We understand 'consistent use' to mean that the optimal potential for use has more or less been exhausted by the company.

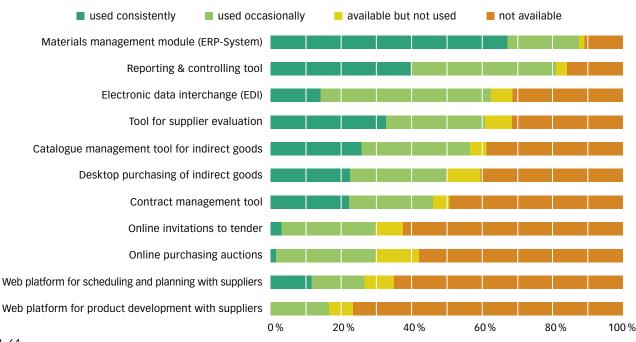
A materials management system is used by 87.5% of the companies and is used consistently by two thirds (Figure 13). Reporting and controlling tools are also heavily used. 39.1% of the companies report using them consistently and a further 40.6% use them occasionally.

Solutions for the electronic interchange of structured data (EDI) with suppliers are supported by 62.5 % of the companies. However, this happens only occasionally in the large majority of cases, doubtlessly because it is difficult to involve all partners in such solutions.

Tools to evaluate suppliers are consistently used by  $32.8\,\%$  and used occasionally by a further  $28.1\,\%$ .

The tools which serve more efficient order processing of indirect goods appear in the mid-range. The use of catalogue management tools are reported slightly more often than the application for electronic ordering of indirect goods (desktop purchasing).

Figure 13: IT tools used for procurement



Tools for the management of contracts (i.e. for the drawing up, administration, distribution of and compliance with contracts) are only consistently used by  $21.9\,\%$  of the companies. A further  $23.4\,\%$  apply them in certain selectively.

Online invitations to tender and online purchasing auctions are used by roughly 30% of the companies, but are only used consistently in rare cases. It is striking here that some study participants (7.8% and 12.5%) have access to such applications but do not make use of them. Similar values are given for tools for supplier evaluation, desktop purchasing and platforms for cooperative disposition and planning with suppliers.

The platforms for cooperation with suppliers are used least. This is explained by the fact that, among other reasons, they are not used by all industries. While solutions for collaborative scheduling and planning are employed above all in transaction intensive sectors with a high degree of material turnover, platforms for collaborative production development are heavily used in the manufacturing industries with a high proportion of engineering.

## 3.6 SAP is predominant in procurement departments

68.4% of study participants use the SAP materials management module for operative order processing (Figure 14). The SAP solutions Enterprise Buyer Professional (EBP) and its preceding version (BBP) are used by 21.1% and the more comprehensive solution Supplier Relationship Management (SRM) by 8.8%

of respondents, showing that SAP clearly dominates the market. Solutions by Oracle, including its acquired providers, PeopleSoft and J.D. Edwards, are represented with 8.8% and Ariba makes up 5.3%. In-house developments are used by 7% of the companies.

 $14.0\,\%$  of the companies use additional Purchasing Cards to support operative order processing. The use of further solutions, marketplaces or service providers has been reported by  $38.6\,\%$  of the respondents.

#### 3.7 Overall satisfaction with the IT tools used

Next to be investigated is how well the instruments used for procurement fulfilled the expectations of the study participants. The questionnaire required a holistic assessment with regard to acceptance, utilisation, efficiency and effect.

The general outcome, reported by 80% of the respondents, was that their expectations of the IT instruments used were (largely) fulfilled. In particular it was established that the expectations of the materials management system were met best. 38.2% of companies reported that this application had completely fulfilled their expectations. In contrast with this, online purchasing auctions, online invitations to tender and web platforms for collaborative product development received the lowest ranking.

#### **Success Story**



#### Order and supply management with advantages for Migros and suppliers

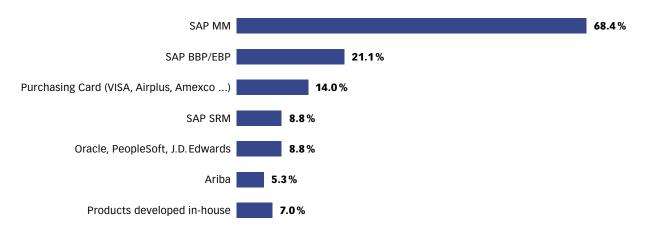
With the introduction of a new centralized materials management solution the Federation of Migros Cooperatives (MGB) planned flexible connection of suppliers with the new SAP Retail System. In addition, a process-oriented order and supply management solution was to be put into effect. The aim was to design their retail business activities to be more efficient across the board and reduce administrative costs.

MLSonline connects suppliers fully with the electronic processes of Migros and offers them internet-based access with the highest level of safety standards. The users have access to their specific data irrespective of time and place via a software client that can be downloaded from the internet. The data is centrally stored on the Migros server. They do not have to be concerned about data security and system maintenance as Migros takes responsibility for this. For examples, in line with the motto 'zero administration', new versions of MLSonline are automatically distributed and made available. The solution supports the suppliers of Migros in the efficient handling of all process steps required, such as master data and contract management, order processing, setting-up processes, commissioning, compiling supplier documentation and labelling of transport units as well as invoicing. The suppliers can also check and manage the inventory in the Migros central warehouse day by day (Vendor Managed Inventory).

Since the introduction of MLSonline in March 2003, over 200 suppliers have been successfully connected with it. In 2005 Migros received around 260,000 invoices, transmitted electronically via MLSonline, which then did not have to be processed manually. Further savings were registered by Migros in the distribution centres, where 28,000 deliveries were received more simply by scanning the SSCC-logistics codes issued with MLSonline.

Richard Rothenfluh, Area Manager of Supplier Systems, Migros (MGB) – Marketing Services Supply Chain Support, Zurich

Figure 14: IT solutions used for operative order processing

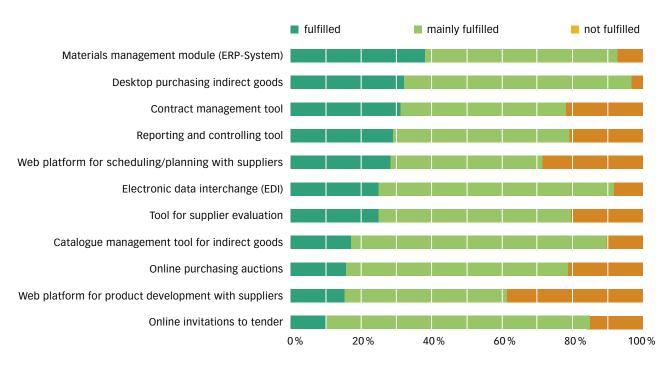


N=57

It can be seen from Figure 15 that the expectations of over 20 % of the responding users were not fulfilled with regard to several instruments. These were the following:

- $\bullet$  Web platform for collaborative product development with suppliers (38.5 %)
- Web platform for scheduling/planning with suppliers (28.6%)
- Contract management tool (21.9%)
- Online purchasing auction (21.1%)
- Reporting and controlling tool (20.8%)
- Tool for supplier evaluation (20.5%)

Figure 15: How well do the IT tools used for procurement fulfil your expectations?



N=mind.13/max.55 users

## 4 Electronic Data Interchange with suppliers

The potential of information technology also lies in the design of processes beyond the company's borders. It was therefore investigated to what degree the interchange of structured, electronic business documents with suppliers is developed in the Top 200 companies in Switzerland, such as orders, despatch advice or invoices.

#### 4.1 Few companies with high electronic volume

Figure 16 shows that the potential of electronic process optimisation outside the company is used by few study participants to any great extent. Almost half (46.8%) of the companies do not exchange documents electronically with their suppliers. Only 14.6% of the responding Top 200 companies exchange documents electronically with 100 or more suppliers.

## 4.2 Greatest volume with electronic orders and invoices

53.2% of the companies who exchange business documents completely electronically with their suppliers (i.e. transmission or receipt of documents takes place in structured form without renewed manual data entry) reported doing this with the following documents:

- Purchase order 84.8 %
- Invoice 57.6 %
- Order confirmation 57.6%
- Request for quote/bid 57.6 %
- Despatch advice 48.5 %

If the documents which are exchanged electronically are compared with the total number of documents, including those in paper form, orders and invoices achieve the highest values. Other types of documents lag somewhat behind. In addition it can be ascertained that few companies consistently use the electronic route. The majority of Top 200 exchange less than 20% of all types of documents electronically with suppliers.

#### 4.3 Fully integrated solutions predominant

In the investigation of methods used for electronic data interchange it stands out that fully integrated solutions predominate among the study participants (Figure 17); whether due to direct connection with suppliers (65.6%) or via a B2B marketplace or B2B transaction platforms (31.3%). To the same degree (31.3%), companies offer their suppliers a web portal (WebEDI) for the reception or provision of electronic data by means of web browser via such a service provider. Only 18.8% of the respondents run such a supplier portal themselves. 12.5% show that they use other methods for document exchange.

Figure 16: Number of suppliers with whom business documents were exchanged by means of EDI/WebEDI

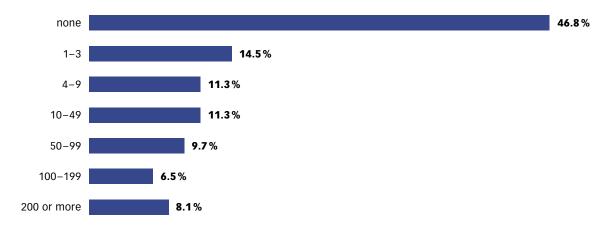
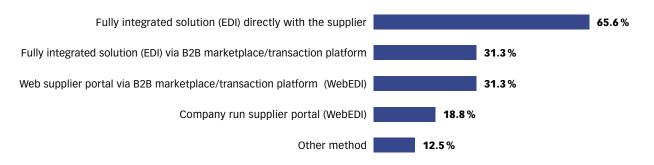


Figure 17: Methods by which electronic business documents are exchanged with suppliers



N = 32

## **4.4** Lack of supplier involvement and balanced B2B solution scenarios

In order to get to the root of why integrated B2B solutions have only penetrated to a small extent with suppliers, study participants were confronted with a variety of statements and asked to what extent they agreed. Their answers do not provide a clear picture of the cross-section of the Top 200. This would require a more in-depth investigation.

Over 60% of procurement organisations judge the suppliers' lack of awareness and infrastructure to optimise B2B processes as a hindrance on the way to integrated B2B solution scenarios.

However, 48.4% of the responding Top 200 admits that suppliers can not always be offered appropriate or affordable integration solutions. In addition, the majority of the companies agree with the statement that the current B2B

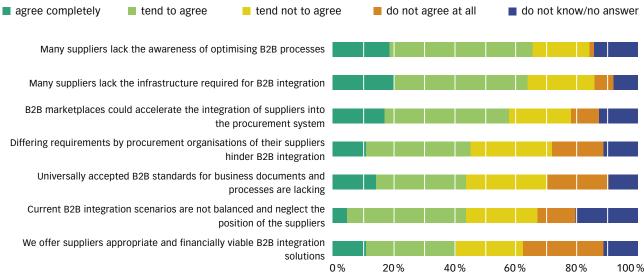
scenarios are not balanced and the position of the suppliers is insufficiently considered, although only 4.7% of respondents agree completely with the latter.

Over 40% of the companies see the varying requirements of the procurement organisation to their suppliers as a hindrance. Almost as many lack accepted and widespread B2B standards for business documents and processes.

B2B marketplaces could accelerate the integration of suppliers with the procurement system of the Top 200 companies. 57.8% of the study participants tend to agree or agree completely with this statement.

Noteworthy in Figure 18 is also the high proportion of companies who did not comment on the statements. The proportion of companies who did not respond to the statement about the balance of current B2B integration scenarios was even over 20 %.

Figure 18: To what extent do you agree with the following statements?



## 5 IT support in services procurement

International studies reveal that in spite of a growing proportion of purchased services, the management of these costs and processes is not yet very advanced compared with cost management of direct and indirect goods. The support of services procurement by means of information technology is, in comparison, not very developed either. For this reason the topic area has been examined in more depth within the scope of the study at hand.

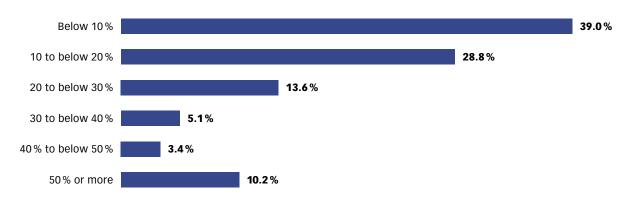
We have investigated how high the procurement volume is and how the companies judge their efficiency in the procurement of services. In comparison with this it is of interest to know to what extent processes are already supported by information technology today. Lastly, the study participants were asked to make statements regarding the areas in which they see a need for further development of IT solutions.

For 67.8% of the companies the proportion of purchased services is less than 20% of the total procurement volume (Figure 19). Only 10.2% of the respondents report a proportion of over 50%.

## 5.1 Record and evaluation of services rendered could be more efficient

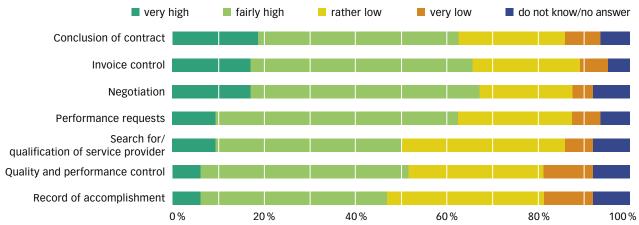
At first glance the survey results show that the majority of the respondents judge their process efficiency in the procurement of services as either high or very high (Figure 20). On closer inspection it can be observed that no more than 20% report very high efficiency in any of the processes. In contrast, more than twice as many companies rate their process efficiency in quality/performance control and record of services accomplished as very low.

Figure 19: Purchased services as a percentage of total procurement volume



N=59

Figure 20: Process efficiency in services procurement



very high fairly high low not supported do not know/no answer Invoice control Quality and performance control Record of accomplishment Search for/ qualification of service provider Performance requests Conclusion of contract Negotiation 0% 20% 40% 60% 80% 100%

Figure 21: Process support of services procurement with IT tools

N=64

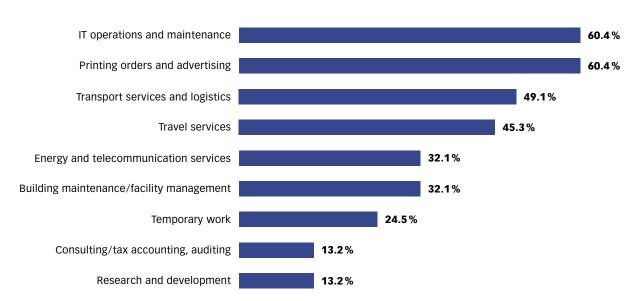
## 5.2 Process support by means of IT lags behind reported efficiency

The relatively high process efficiency declared by the study participants (see Figure 20) seems to have come about without IT support. In the question of process support by means of IT in the procurement of services, their responses are not very high (Figure 21). Only invoice control is fairly well or very well supported with IT tools. This could be due to the fact that invoice control is a standard function of business software and the company uses this for services in the same manner as for physical goods.

If the proportion of companies who report that they do not support their processes with information technology is taken into consideration, the total ranges from  $20.3\,\%$  for invoice control to the considerable sum of  $53.1\,\%$  for negotiations.

Figure 22 shows the services which are procured by the study participants mainly with the support of IT instruments, that is, more than just the order entry is made with business software for this type of service.

There is a tendency to give more support to simple, and measurable services which easy to specify. It has not been clarified whether the respective IT solutions are in-house applications or provided by the supplier and tailored to the service inquestion (e.g. webportal for ordering and coordination of transport and logistics services).



5.7%

Figure 22: Services which are mainly procured with the support of IT tools

Other services

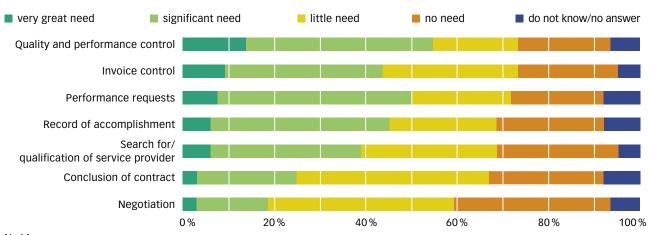


Figure 23: Need for greater support of services procurement with IT tools

N = 64

## 5.3 Greater need for development in operative processes

From Figure 23 it is evident that the need for more comprehensive IT support in procurement of services is judged as greater

than the current use of IT. It stands out that the operative and therefore frequently repeated processes take priority, such as quality and performance control, invoice control, performance request and record of services accomplished.

Success Story IBM Switzerland

#### Increased transparency and efficiency due to Online Quoting

In the past IBM Purchasing used an Internet Quoting Tool developed in-house for invitations to tender. The use of such an application was indisputable. However, the tool did not meet the requirements of the time and was therefore affected by an insufficient degree of use. This led IBM to seek a state-of-the-art solution which would do justice to the needs of the globally operating procurement managers. The platform 'Emptoris Sourcing Portfolio' (ESP) was decided upon as a result of a worldwide invitation to tender. The in-house application was replaced by Emptoris in mid-2005 after a short, smooth changeover.

ESP is centrally operated by IBM and used in purchasing worldwide to help decision making in the selection of suppliers. Application can be made in several languages, currencies and time zones and, in addition, provides a variety of options for invitation to tender, evaluation and configuration. Access is provided for purchasers and suppliers by means of an internet browser.

In Switzerland it is mainly service requirements which are advertised with this tool. As a rule these are requests for quotes which are set up by the procurement departments. These take into consideration not only the price, but usually also qualitative criteria. In this way, Purchasing benefits from structured, electronic decision-making information, standardised processes and thus, increased transparency. Comprehensive evaluations and comparisons can be made along with the contracts available company-wide.

Thanks to the powerful and, nevertheless, user-friendly application, IBM Switzerland has come a significant step closer to its mid-term goal of advertising 70% of its requirements online.

Christian Lüdecke, Country Procurement Manager, IBM Switzerland

The result for IT support in negotiations deserves comment. Study participants reported the least need in this regard, although the market offers specialised solutions in the form of online invitations to tender and auction tools. Current use is also very low. It remains to be seen whether this is due to the lack of familiarity with such solutions or if procurement managers do not believe in the efficacy of the tools.

Study participants who do not report any need for greater IT support are mostly companies who already use IT tools to high degree in the processes concerned.

Advertisement

## From order to payment:

End-to-end process integration, highly automated.

HP provides process and IT consulting for Supplier Relationship Management solutions with a specialized team of SAP experts.

Find out more about HP Consulting Services for SAP: www.hp.com/ch/sap

invent

# 6 Challenges in the utilisation of IT for procurement

In the previous sections it is established that IT without doubt plays a significant role in everyday procurement, but that the expectations of IT are rarely completely fulfilled. Before the intentions for the further development of IT utilisation are examined in chapter 7, this chapter clarifies what procurement managers see as the challenges facing them.

## **6.1** High costs, few suppliers and deficient master data

One of the biggest difficulties seems to be the high introduction costs for new solutions. This was named by 61.3% of the study participants. Closely connected with this is the statement of 48.4% of the companies that the benefit and the potential of new IT solutions are difficult to appraise. This should lead the solution providers to deduce that the challenge is to give high priority to cost / benefit considerations and, in relation to this, to transparent, open communication.

In chapter 4 it was ascertained that Electronic Document Interchange with suppliers in the Top 200 companies in Switzerland is only at an advanced stage in a few companies. 54.8% of respondents describe the slow integration of suppliers to the procurement system as one of the main difficulties in effectively using appropriate IT solutions.

Poor quality of master data remains an ongoing issue. 51.6% of companies still see a problem here.

For four out of ten study participants a further difficulty in the use of IT lies in the lack of user-friendliness and user acceptance.

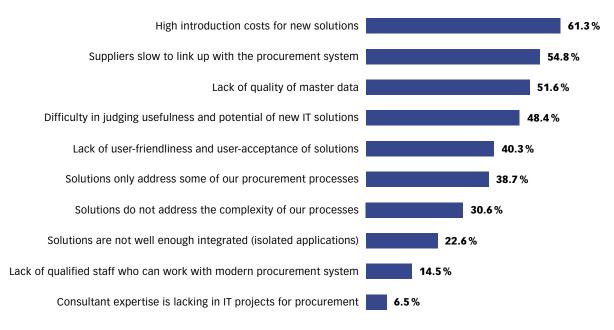
38.6% of companies see problems in process support, because only some of the procurement processes can be covered by IT solutions and 30.6% attribute it to the IT solutions not addressing the complexity of the processes. In total, however, only 22.6% of the respondents are of the opinion that a major difficulty lies in the lack of fully integrated software solutions.

The lack of qualified staff is a problem for few of the Top 200 companies in Switzerland. Only 14.5% of the respondents see a problem here. This contrasts with the results of an international study by the Economist (The Economist, 2005, p 23) commissioned by SAP, which was conducted with 350 management board members. 58% of participants reported that the lack of qualified staff and training were the greatest challenge to achieving maximum efficiency in procurement. It is quite possible that, in comparison, companies in Switzerland can count on better educated staff.

Consultant expertise does not seem to cause a bottleneck for further development of IT for procurement, as only  $6.5\,\%$  see any difficulty in this area.

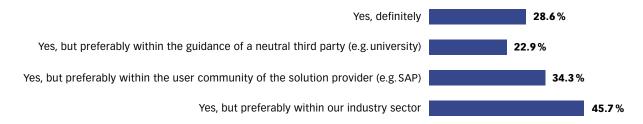
The study participants were also asked to what extent they would agree that the quality of data on expenditure in the

Figure 24: Main difficulties when using IT for procurement



N=62

Figure 25: Would your company be prepared to seek solutions alongside other procurement organisations and partners with regard to the greatest challenges?



N = 35

company was insufficient. 39.1 % agreed completely or tended to agree. 28.1 % of companies reported in addition that many orders were placed outside the negotiated contracts, described as maverick buying.

#### 6.2 Tackling the greatest challenges together

Many difficulties cannot be resolved alone, either because the procurement organisation is dependent on the cooperation of suppliers and business partners, or because their own degree of influence is limited. Study participants were therefore asked whether they were willing to tackle the greatest challenges together with other procurement organisations and partners. 61.4% said 'yes' and for 28.6% of them, this was an unconditional

'yes'. 22.9% preferred leadership and coordination through a neutral third party (not a vendor), for example a university. 34.3% prefer to work on the challenges within the user community of the solution provider while 45.7% would prefer to tackle this within their industry sector.

#### **Success-Story**



#### Cost savings due to electronic invoice processing

What began in 1999 with the introduction of electronic ordering in the area of office supplies, continued in 2002 with the connection to the electronic trading platform Conextrade. A further milestone was reached when digitally signed electronic invoices were put on an equal footing with paper invoices by the Federal Tax Administration in March 2002. Since January 2004 UBS has received VAT compliant electronic invoices from suppliers, which are accepted as original documents.

However, UBS has not only changed to automated processes in external document exchange with suppliers, but also in internal invoice processing. In close cooperation with the accounting department, an electronic approval process by the name of "e-invoicing" was introduced for invoices which do not refer to a purchase order. Suppliers are asked to send their invoices to UBS via the trading platform and the recipients are identified by personnel number. All steps take place directly in the SAP System of the bank, from the verification to release for payment. The invoices are activated by the touch of a button and no longer need to be sorted, transported by post, rubber-stamped and entered in the system. Instead, the "original" is with the recipient in seconds and is processed by means of web browser.

The electronic handling helps avoid media discontinuity and saves the bank a lot of time and money, from the receipt to the entering of an invoice.

Rudiguer Marbé, Head of Procurement, UBS Ltd., Zurich

# 7 Further development of the use of IT in procurement

Lastly, the procurement heads were asked how they estimated the further development of their IT utilisation, who the driving force in the company was in this regard and what the main focus would be. They were also asked to make statements regarding /should also estimate their planned expenditure for the next two years.

#### 7.1 Procurement managers at the helm

Development of IT use is mostly driven forward by the procurement department. 88.9% of respondents answer in this way (Figure 26). 31.7% of companies also name their process managers as key drivers. This leads to the conclusion that there is a certain process orientation in the organisations. A quarter of the companies report, that top management encourages the further development of IT for procurement. This factor corresponds at the same time to one of the success factors named by many companies in the realisation of IT projects.

## 7.2 Strategic level: Optimisation of transparency and reporting in focus

The Top 200 companies were asked where their priorities lie in the enhancement of IT in their own company to support strategic and also operative procurement processes.

In the case of strategic processes it is striking that the main focus is on reporting functions (Figure 27). Nearly 70% of the companies give high or very high priority to optimising the analysis of expenditure. IT support of supplier assessment is also given above average priority with over 60% mentioning it.

It may come as a surprise to find that the further development of IT in the areas of sourcing processes (supplier identification, negotiation) does not receive higher priority. In view of the efforts made to reduce prices and the low usage of online auctions and invitations to tender, higher values would have been expected here.

## 7.3 Operative level: Optimisation of order and invoice processing in focus

In the further development of IT support of operative processes, order and invoice processing are at the top of the list of priorities (Figure 28). The optimisation of order processing of direct goods takes priority over indirect goods, services and investment goods. If the answers with high priority and fairly high priority are added together, the introduction or enhancement of automated invoice entry processing attains the highest value with 68.8%.

Figure 26: Who drives the key developments in the use of IT for procurement?

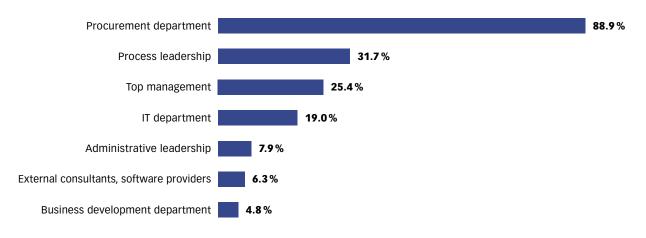
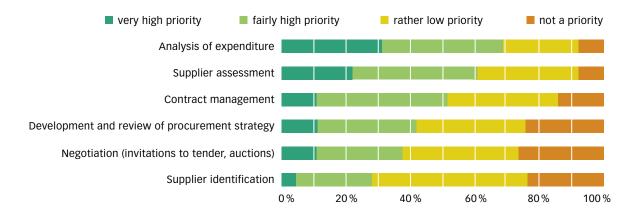
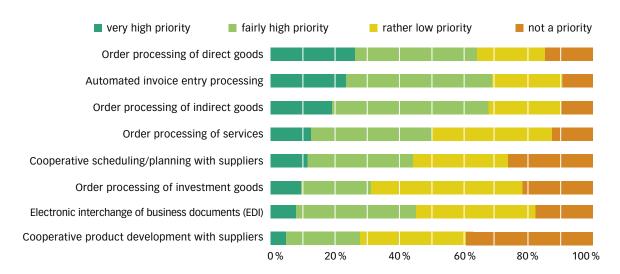


Figure 27: Further development of IT to support strategic procurement processes



N = 64

Figure 28: Further development of IT to support operative procurement processes

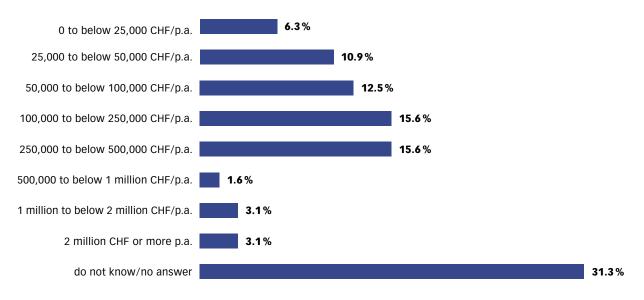


N=64

With regard to the exchange of electronically structured business documents such as orders, invoices and dispatch advices, the companies tend to be less enthusiastic. In only 8.1% of the responding companies is the dealing of this issue given high priority.

Considering that cooperative disposition and planning with suppliers is not important to all companies and sectors,  $42.2\,\%$  of companies still attach very high or fairly high priority to developing this area. This corresponds with the data on unfulfilled expectations in the use of these IT tools (see Figure 15).

Figure 29: Estimated annual expenditure for the further development of IT for procurement for the years 2006 and 2007



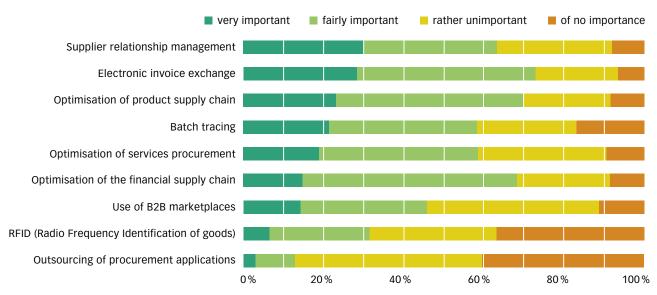
N = 64

## 7.4 Investment in optimisation and less in major projects

It is not the case that procurement managers are satisfied with the achieved or current status of IT utilisation. Of the companies that

made a comment on their planned expenditure for the further development of IT for procurement, more than half will invest more than 100,000 CHF yearly in the next two years (Figure 29). However, few companies are planning major projects.

Figure 30: Importance of topics for the company in the coming years



#### 7.5 Hot topics: SRM and e-invoicing

Finally, the survey participants were asked to estimate the importance in the coming years of nine topics.

The broadly diversified potentials of the comprehensive "Supplier Relationship Management" concept (SRM) will make it the main topic of the coming years.  $30.1\,\%$  of companies rate SRM as very important, a further  $32.4\,\%$  as fairly important (Figure 30). The question as to whether the strategic or operative functions are more in the foreground is not answered.

Electronic exchange of invoices (e-invoicing) is a topic for the future in over 70 % of the companies. Almost 30 % rate it as very important. This may be, on the one hand, due to the potential for optimisation of these administrative processes, but on the other hand it could be due to the legal conditions which have been created, increasing acceptance of electronic invoicing as well as advanced offers of provision of services.

The optimisation of the Product Supply Chain is judged as slightly more important than that of the Financial Supply Chain. Along with the highly rated importance of SRM, this underlines the intention of the companies to tackle process improvements comprehensively and beyond company borders.

Although batch tracing is primarily a central requirement in the process industry, this topic was also rated as important or very important by companies in other sectors. It is to be assumed that some study participants equated this with the tracing of orders.

The grading of the optimisation of services procurement mirrors the results of chapter 5, where a need for enhancement of IT support for most sub-processes is reported by nearly  $50\,\%$  of participants.

45.3% of the procurement organisations rate the use of B2B marketplaces as a very important or fairly important topic for the coming years.

The topic of outsourcing of procurement applications receives little attention from the study participants. Only 12.5 % of them classify it as fairly important or very important.

RFID as a new technology for identification of goods is a focal point for providers, science and media. However the survey shows that in procurement organisations the topic is only judged very important by 6.7% and quite important by a further 23% for the coming years.

## 8 Conclusions: Progress on the spot as procurement trims up

The last few years have been quiet in the area of e-procurement. Online marketplaces, auctions and internet based tendering have not revolutionised procurement. As in other fields of application of e-business, however, one should not assume that nothing is happening in the procurement departments in the IT field.

Over the last five years, every second company questioned has invested more than a quarter of a million Swiss francs in the further development of IT for procurement. It will increase even more: although large projects are not planned, half of the companies will invest an annual sum of more than 100,000 CHF over the next two years.

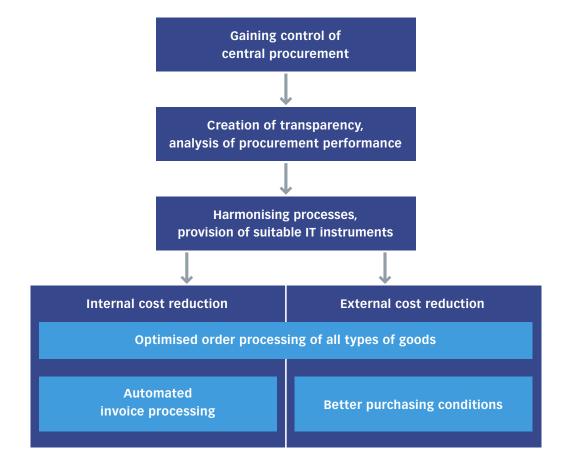
#### 8.1 Procurement goals remain stable

Goals in procurement have largely remained stable in the last few years [Tanner 2003]. The guiding theme is cost reduction, most importantly of purchasing prices but also of total costs, therefore including internal process, logistic and quality assurance costs. The second issue is transparency and control. It is no longer sufficient that, in the vast majority of cases, purchasing goes well and that procurement is well organised in most fields. It must achieve the optimum level across the board. Three quarters of the participants in the study ranked information technology as important. The first task of IT is the central coordination and demand aggregation, which was named as very high priority by the majority questioned.

Whoever expects a push in auctions as a result of cost pressure, will learn better from this study. The companies optimise their procurement from inside to outside. On the strategic level, spend analysis, supplier evaluation and contract management are the focus of the majority of the companies. On the operative level, automatic invoice entry processing as well as order processing of direct and indirect goods have high ranking, followed by the order processing of services.

From the individual aspects mentioned, the following big picture can be deduced:

Figure 31: Functional chain of optimisation in procurement



## **8.2** Information technology should enable top performance

The heterogeneity of processes and systems due to decentralised procurement structures which evolved historically makes not only transparency more difficult but also the detection of weak points and the aggregation of demand. The gain of control of central procurement should counteract this, which is not to say that procurement as a whole should be centralised. Complete transparency tracks down the remaining weak points both internally and externally. Investment in IT should lead to their elimination. IT investment pays for itself more quickly when used in a broader way, where possible with companywide application. It further increases transparency because performance indicators are uniformly raised and benchmarks can be set. New processes are designed and, as far as possible, standardised. These processes include the suppliers, at least in as far as the suppliers must agree to defined processes and IT interfaces. Of course, renegotiation happens too, in which conventional negotiation procedures will, in the next five years, continue to put online auctions in the shade. Where it is worthwhile, internal optimisation will also be invested in - the automatic processing of incoming invoices is the most prominent example at present.

If procurement was focused on direct goods in the past, it today has indirect goods undiminished in sight. Order processing of services is also becoming a priority for half of the questioned companies.

Without over dramatising, procurement has completed a stringent fitness programme. In this, it seems to be on the right path. The project goals have largely been achieved and 80% of the questioned companies are, at least, largely satisfied with their current systems. The fact that more investment is being made despite this, shows that procurement is striving for peak performance.

This does not pass the suppliers by. They are affected by practically all current operative issues. It does not look different in regard to future issues. The number of companies which already exchange business documents electronically is approximately as large as the number of companies that complain about the sluggish integration of suppliers into the procurement system. Only 20% of the procurement heads attest sufficient awareness to their supplier for the optimisation of B2B processes. The capability necessary for a B2B integration infrastructure for suppliers is not rated higher. Just half of the procurement organisations also confess that B2B integration scenarios do not consider the supplier's situation enough and that their company cannot always offer a suitable and financially acceptable B2B integration solution: Two thirds of those companies which offer their supplier Web-EDI make use of a B2B marketplace or a transaction platform.

#### 8.3 All involved parties are called upon to act

As well as the difficulties with in the supplier integration, there are further problem areas in the roll-out of IT. High installation costs and problems with the quality of master data are also complained about by the majority questioned. In order that procurement's fitness programme is effective and that all the involved companies can stand their ground amidst global competition, the following areas of application can be derived from the study:

- The procurement organisations must improve the quality
  of their master data themselves and test whether their
  procurement process really needs to be so multifaceted and
  complex. They must also build bridges for their suppliers.
  In many cases, their own particular idea cannot be carried
  through on purchasing power alone balanced B2B
  integration scenarios can help keep a lot of spanners out of
  the works.
- The suppliers must also work on their B2B fitness. Is their awareness and is their competence in this area really as bad as their image suggests? The slogan is: Build up competence and be proactive in showing customers how a balanced integration scenario for their own product segment could look.
- Providers of procurement solutions should have a vital interest in having well founded arguments with which to defend the difficult-to-appreciate benefits of their solutions. The insufficient user-friendliness and user acceptance should also be addressed. The main objection of procurement organisations, i.e., the high installation costs of new solutions should also be taken seriously. The cause of high costs lies to a decisive extent in the organisation of the buyer and supplier above all in the heterogeneity of these organisations but they may well be able to do something about this. With best practice, a certain degree of openness, cooperation in standardisation and support of interoperability, some of the complexity can be reduced and the pace of market development can be accelerated in their own interests.

Regarding future topics, supplier relationship management takes first place. All the other topics necessitate solutions which go beyond the borders of the own specific organisation. If all the market participants want to develop these relationships individually, one would have to wait a lot longer for any substantial progress. However, a three quarter majority of the companies are prepared to tackle the greatest challenges such as supplier integration together with other procurement organisations and partners. Now actions must speak louder than words!

## **Bibliography**

**Aberdeen Group (2005)**: Best Practices in E-Procurement – Reducing Costs and Increasing Value through Online Buying, Boston, 2005.

**Aberdeen Group (2003)**: Service Spend Management: Adressing the Total Cost Lifecycle, Boston, 2003.

**A.T. Kearney (2004)**: Making Procurement a Priority, Chicago, 2004.

**Bundesamt für Statistik (2002)**: Betriebszählung 2001, Neuchâtel: Bundesamt für Statistik, 2002.

**CAPS Research (2003):** Managing Your "Services Spend" in Today's Services Economy, Tempe AZ, CAPS: Center for Strategic Supply Research, 2003.

Carter, Phillip L.; Monczka, Robert M. (2005): Strategic Performance Measurement for Purchasing and Supply, Tempe AZ, CAPS: Center for Strategic Supply Research, 2005.

**Economist (2005)**: The new face of purchasing, Economist Intelligence Unit, 2005.

**Handelzeitung (2004):** Top 2004 – Die grössten Unternehmen in der Schweiz, Zürich: Verlag Handelszeitung und Finanzrundschau, 2004.

**Minahan, Tim A. (2005):** Five Strategies for High-Performance Procurement, in: Supply Chain Management Review, September 2005.

Schubert, Petra; Wölfle, Ralf; Dettling, Walter (Hrsg.) (2004): E-Business mit betriebswirtschaftlicher Standardsoftware, München, Wien: Hanser Verlag, 2004.

Schubert, Petra; Wölfle, Ralf; Dettling, Walter (Hrsg.) (2003): E-Business-Integration: Fallstudien zur Optimierung elektronischer Geschäftsprozesse, München, Wien: Hanser Verlag, 2003.

Schubert, Petra; Wölfle, Ralf; Dettling, Walter (Hrsg.) (2002): Procurement im E-Business: Einkaufs- und Verkaufsprozesse elektronisch optimieren, München, Wien: Hanser Verlag, 2002.

**Tanner, Christian (2003)**: E-Procurement-Studie: E-Supplier - Situationsaufnahme bei E-Procurement-Betreibern, Basel: Fachhochschule beider Basel (FHBB), Institut für angewandte Betriebsökonomie (IAB), Arbeitsbericht E-Business Nr. 18, 2003.

Wölfle, Ralf; Schubert, Petra (Hrsg.) (2005): Integrierte Geschäftsprozesse mit Business Software, München, Wien: Hanser Verlag, 2005.



We sharpen your vision. And give your business new perspectives.

It's the key to e-business: With a clear vision from the outset, you'll reach your goal more quickly. You need a partner who sees your e-business needs clearly, from strategy development to operational requirements, and helps you steer a direct course to profitability. That partner is itelligence, the premier consultant for profitable SAP e-business solutions. We conduct a comprehensive potential analysis to show you the best and most cost-efficient way of addressing your requirements, the smartest technologies to use, and the quickest route to a flexible and efficient solution tailored to your needs and growth potential. Call us, and we'll help you sharpen your vision and reach your goals more quickly.





#### **Competence Center E-Business Basel**

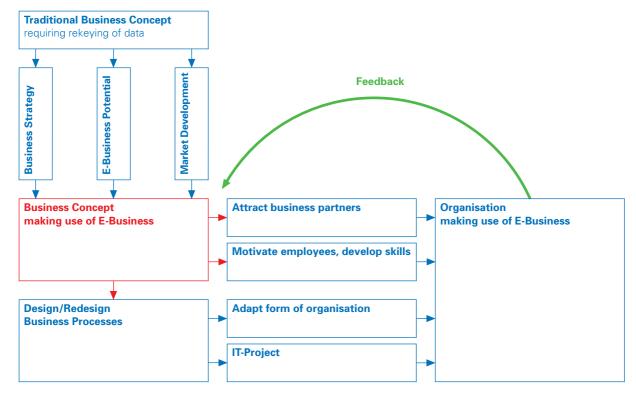
Applied research and consulting services on questions of conception design and management in E-business.

The Competence Center E-Business Basel was founded in 1998 by the University of Applied Sciences in Basel and is today a part of the University of Applied Sciences, Northwestern Switzerland. A team of around eight employees develop solutions, in cooperation with companies, for current problem areas in cross-functional use of information technology in companies. The focal points are:

- B2B e-commerce, including roll-out of e-procurement solutions, solutions for suppliers and electronic invoice exchange
- Personalisation in e-commerce, including utilisation of customer data and the cultivation of profiles
- Use of business software in companies

The Competence Center E-Business Basel carries out regular market studies on the value and status quo of the use of information technology and e-business.

A methodological focal point is the adoption of case studies for knowledge transfer. These are developed according to a conceptual grid, under the direction of the Competence Center E-Business Basel. The case studies are published via three channels of communication: the online case study database www.experience-online.ch, the book publication and the presentation at the experience event, www.experience-event.ch



The e-business project in the company

Competence Center E-Business Basel
University of Applied Sciences Northwestern Switzerland
School of Business
Peter Merian-Strasse 86, CH-4002 Basel
E-Mail: e-business@fhbb.ch