

# Electronic Business – a Challenge for Management



# E-Business: Buzz-word or reality?

The concept of "electronic business" (E-Business) has become a very popular term referring to many innovations. In most cases, however, it is used in an all too one-sided manner. As a leading consultancy, we consider it our obligation to specify what this concept really means and to convey our opinion on this matter.

It is difficult to appraise the tangible benefits of the tentative steps many companies have taken in electronic business. However, those companies quick enough in recognizing early on the strategic significance of E-Business and implementing measures consistently will now be able to identify a clear silver lining on the horizon. Involvement in E-Business will not only benefit corporate image but also carry considerable potential mainly in customer service.

Apart from that, pressure exerted by competitors is increasing steadily. Companies operating internationally

will be the most hard-pressed to enter the field of E-Business.

E-Business is becoming a top-priority issue at the level of executive management.

However, the full scope of E-Business and its strategic significance for a company's future continue to be difficult to assess. The only certainty is that E-Business will not simply come as a tool to be purchased. E-Business is an ongoing process that cannot possibly be mapped out in advance. It is interspersed with stumbling-blocks to be negotiated. The basic prerequisite for successful E-Business is a commitment by top management to embarking on it with full determination.

In PricewaterhouseCoopers, we have embarked on this avenue. We consider E-Business an issue reaching across divisions and challenging us as an integrated consultancy. It will be among our most pressing tasks to make our clients aware of significant potentials

and to be a facilitator coming up with innovative solutions. As a consulting discipline, E-Business ties in seamlessly with our existing portfolio of services and industries, and will gain considerably in significance in the three to four years to come.

This is the prime message we have for our clients: E-Business is not a matter of technology but merely a door-opener towards new fields of business, more efficient structures and leaner processes. What a company requires to make it stand out from the crowd in the market and to create additional customer benefit is ideas and a vision for new and innovative business models. This brochure points out in what way we are able to assist you in addressing the issue involved. We hope you will enjoy reading it.

Tony Haas  
Head of Management Consulting  
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Switzerland

“In my opinion, there is a market for five computers worldwide.”

Thomas Watson, Chairman IBM, 1943

“There is no money for us in Internet.”

Bill Gates, 1994

“By 2002, 35 % of the business volume in the tourist industry will be processed online.”

Datamonitor

“The business-to-business market will grow from USD 17bn today to USD 327bn in 2002.”

Forrester Report 1997

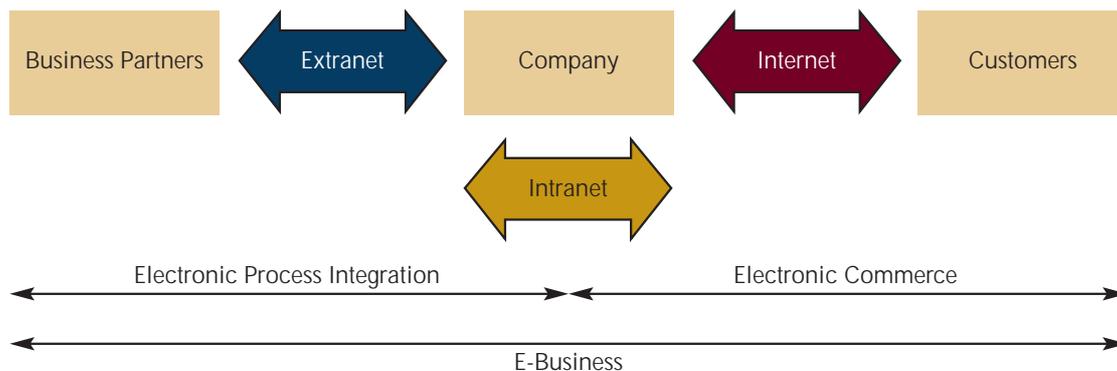
# E-Potential – dynamic development through integrated communication

In recent years, information technology has brought about dramatic change to the business world. Going hand in hand with the process of globalisation, it is making its full effect felt with breath-taking momentum. New forms of communication have come into being within next to no time, opening up interesting prospects also for use inside a company. On one hand, there is intranet to facilitate the exchange

of information between divisions. It provides a platform for decentralising work, and it shortens decision-making processes. Extranet, on the other hand, stands for seamless engagement of business partners in internal business processes. On this basis, considerable competitive advantages can be achieved with respect to pricing and time-to-market. And finally, internet offers electronic access to a rapidly

growing number of prospective customers. The main goal on the road to E-Business is to make full use of the optimisation potential involved in these areas of IT application, in particular in the business-to-business and the business-to-customer fields.

## Internet - Intranet - Extranet



### BUSINESS-TO-BUSINESS:

The electronic business's largest potential lies in business-to-business communication. With companies interlinked in a comprehensive network, it will be possible to operate in the market more rapidly and at more reasonable cost. This will create opportunities to cut warehousing cost, carry out direct payments, decentralise administrative work and so on.

### BUSINESS-TO-CONSUMER:

As end users are directly engaged in the sales process, companies will have a means to enhance customer loyalty while cutting down overhead. Customers will be in a position to tailor orders to their needs before sending them off, with no additional sales-staff capacity required.



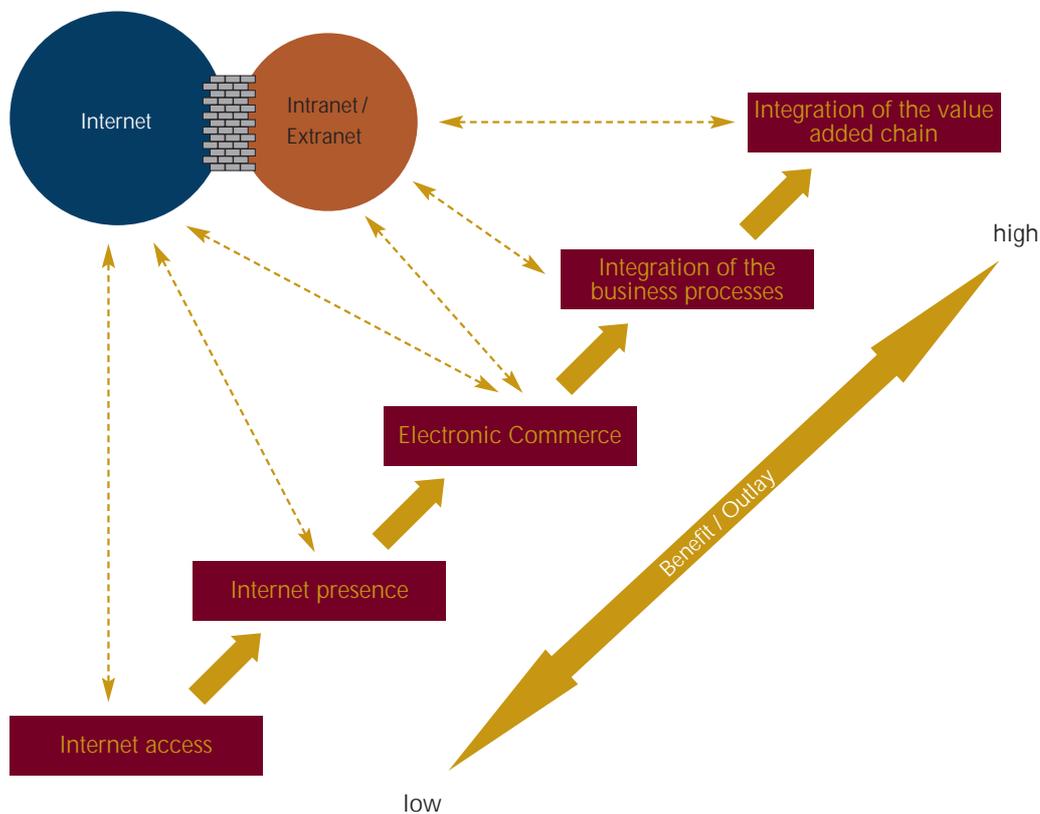
# Create value with E-Business

Much to the amazement of many observers, internet has turned out to be the power house of the information age. It sets technological standards and enforces their acceptance, suddenly putting benefit before technology. A curious newcomer to internet quickly becomes an expert surfer getting ever more skilled at making use of the web. Before long, internet users feel an urge (or might even be com-

pelled) to have a home page of their own. This is a process many companies go through – albeit with modest commercial success, as a general rule. But now, there is a new buzzword lifting entrepreneurial spirits: Electronic Commerce. It triggers new business processes, forms of customer contact etc., and makes the wheel keep on turning endlessly. Business processes need to be adapted to a new culture,

which leads automatically to the next step of implementation, i.e. integration of business processes. The top level of this evolution is reached once a company's entire chain of value creation is mirrored electronically, which means full integration of the flows of information, goods and money between partners, suppliers, customers and the workforce.

## The E-Business Evolution



Any company management have to be clear about the appropriate level of evolution to strive for at a given point in time. These are some of the questions to be addressed:

- What is our current status, and where do we intend to go?
- What is our customers', partners' and suppliers' behaviour?
- What are my competitors' strategies? Are there any new entrants in our traditional market?

## For Example: from Mass Production to Mass Customization by Means of an Extranet

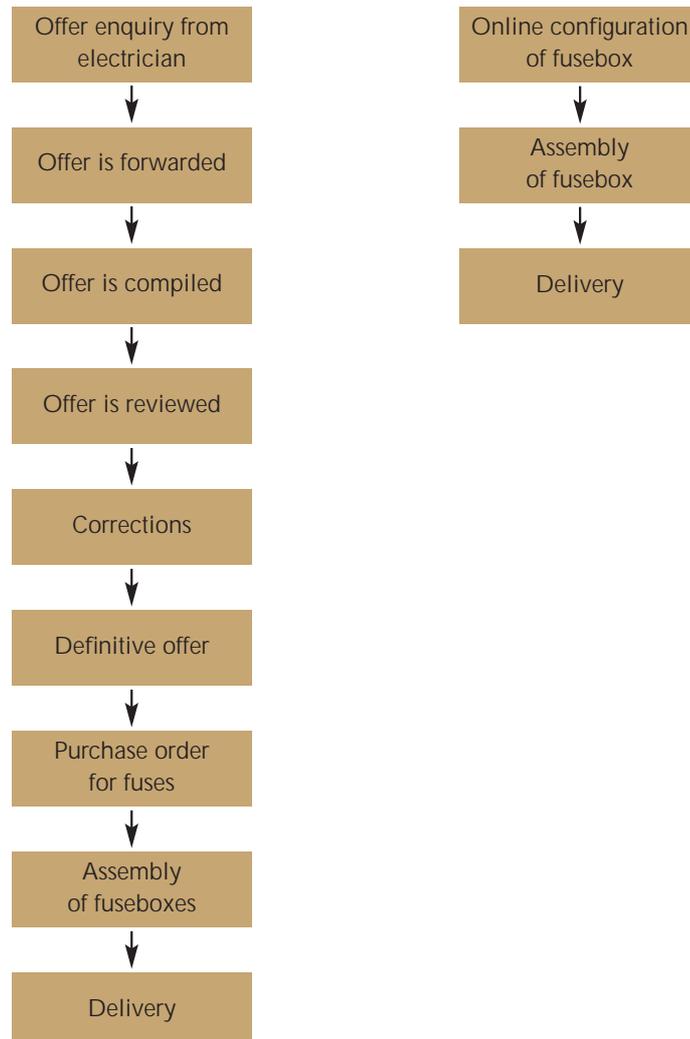
A fuse manufacturer suffering dwindling return made use of an extranet to become a profitable supplier of fuse boxes.

### ...before introducing Extranet

An electrician orders a fuse box from a wholesaler. However, this fuse box must be assembled by an authorized company, with the components supplied by the wholesaler. Quite frequently, a lack of technical knowledge on the part of electricians and wholesalers results in mistaken specifications and a need to check back on, and to amend, certain aspects. Electricians have to wait for three weeks or even longer to get a proper quotation.

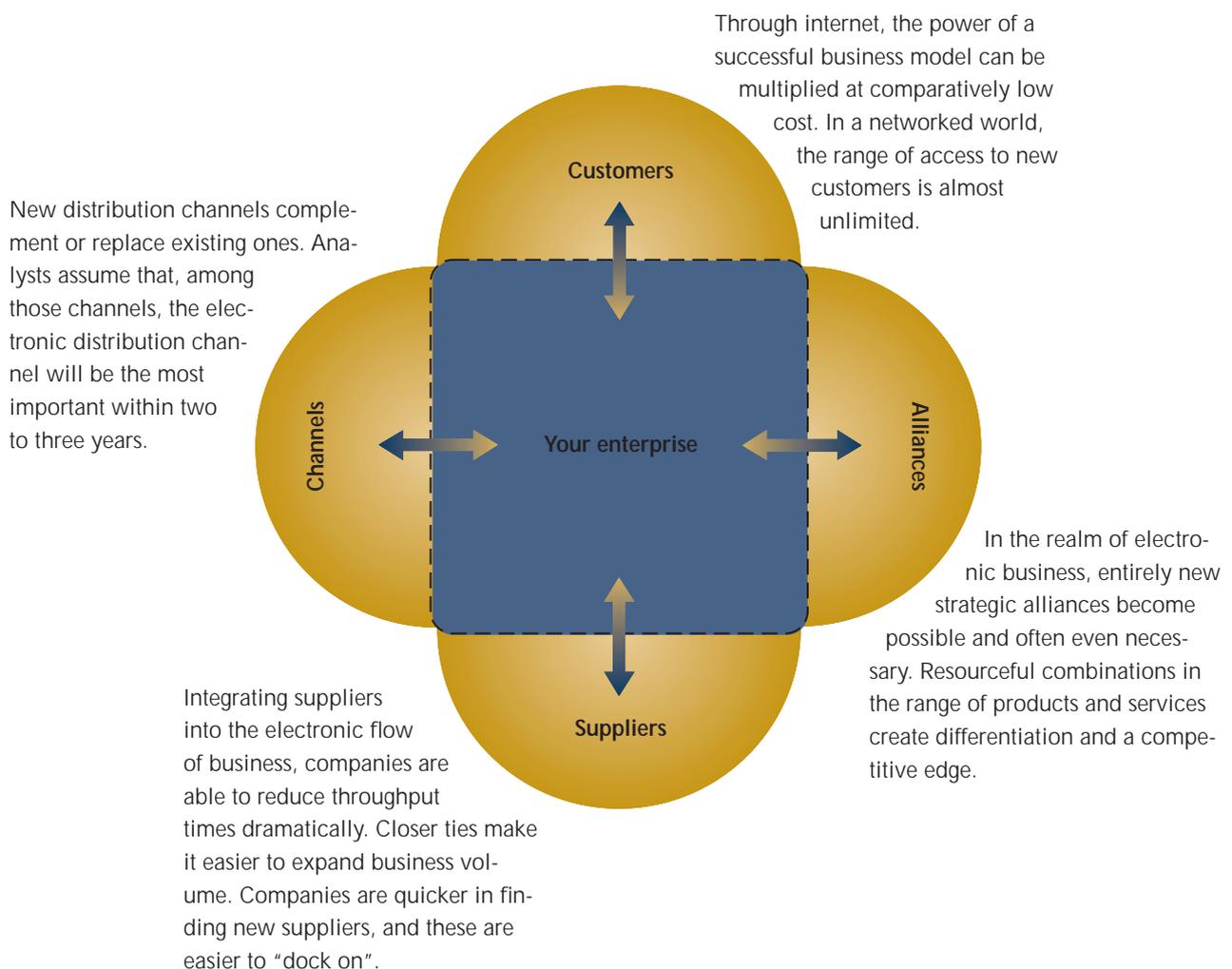
### ...after introducing Extranet

The electrician uses the extranet to place an order for the fuse box. Mistaken specifications are ruled out by means of an automatic configurator. The price for the configured item is indicated instantly. The company's web server communicates the order automatically to the internal order-processing system. Within 24 hours, the fuse box is supplied to the electrician even with proper labelling. Now, the wholesaler can focus on customer support and service. There is no more need for a company specialised only in assembling the fuse boxes.



# Success through innovation

*Today, most companies seem to have exhausted their internal capabilities of improving. However, their customers are challenging them to be ever "faster", "better", "cheaper" and "more holistic". Innovation is at a premium. Innovation can be generated by companies opening up in dealing with their customers and suppliers but also in making use of new distribution channels or alliances. There precisely lies the potential of E-Business.*



# Expanding horizons

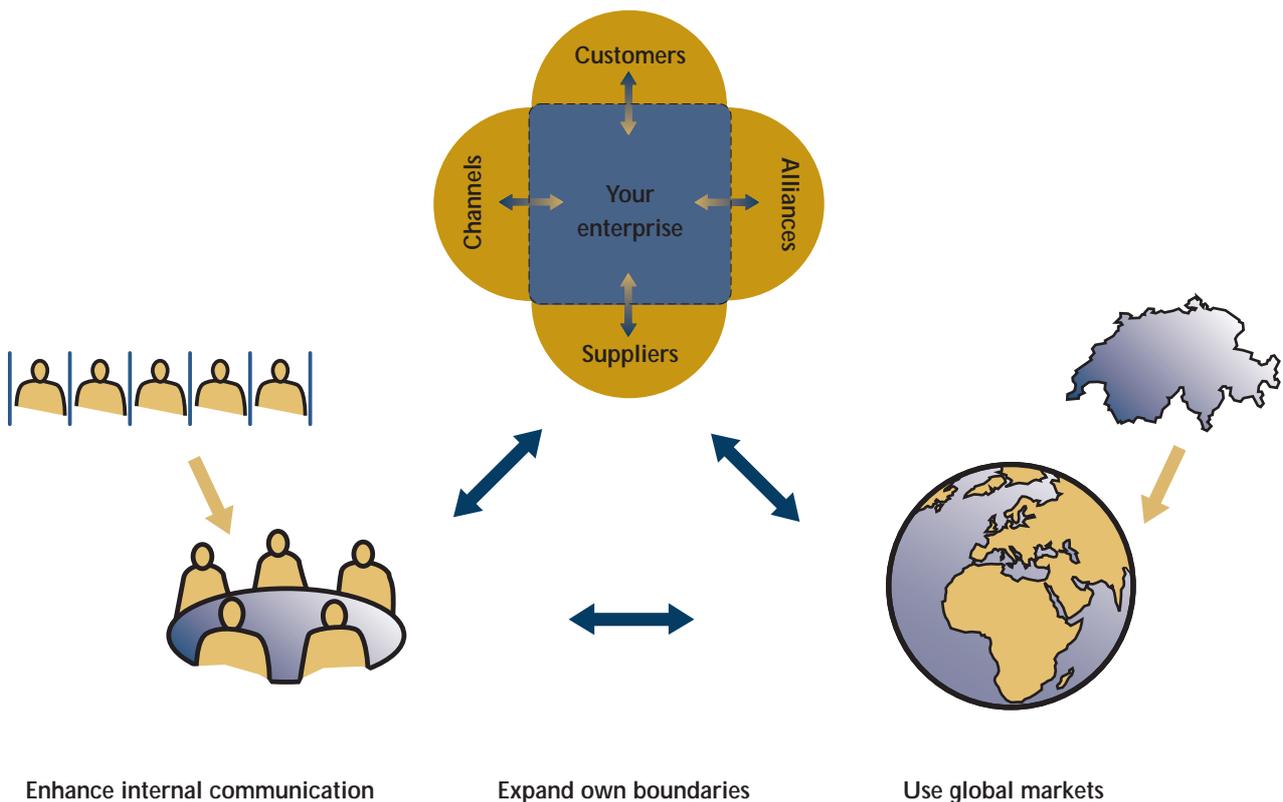
*E-Business will make the third industrial revolution come true. This requires a change of paradigms in processing information. While knowledge used to be considered equivalent to power, and power a thing you do not share, the key to success today is openness. Openness means bringing about change both internally and externally.*

Today, all companies have a wealth of knowledge at their disposal. But unfortunately, many of them are organised in such a manner that their knowledge remains locked away in so-called functional silos. Setting up interdivisional teams and introducing new cultures of communication, com-

panies will be able to make more efficient use of their knowledge. Thus, information will be turned into common property and in a decisive production factor.

Once an electronic platform has been established, it will of course be pos-

sible for a company to go beyond the limited territory of its market in order to offer its product on a global scale. This means that new communication and distribution processes need to be defined.



# Some doubts about E-Business ...

*Although the long-term benefits of electronic business remain largely uncontested, many companies continue to hesitate when it comes to investing in this field. They want to have answers to questions such as:*

- *What is the benefit of an E-Business initiative in concrete terms?*
- *Given the variety of options available, what priorities need to be set?*
- *Should we not rather wait for the whole thing to mature?*

## ... and good reasons to go for it

*Companies that have taken E-Business initiatives have done so with the following purposes in mind:*

- *to increase sales*
- *to cut cost*
- *to create closer ties with their customers*
- *to enhance their image*
- *not to miss the boat*

# The Evolution of your Customers, Employees and Competitors of Tomorrow

“Through compuserve, I send letters to my grandpa, copy stories or learn English.”

Oliver, 9 years

“You can use your computer for learning and even have fun while you’re at it.”

Sarina, 9 years

“On internet, I found somebody willing to swap two David Hasselhoff autographs for a circus ticket.”

Leila, 12 years



“I got a PC for Christmas, plus a game and an animal encyclopaedia. Now, I’m learning how to use it. I’m designing invitations and things like that.”

Lucca, 9 years



Professor Thomas W. Malone is the founder and director of the renowned MIT Center for Coordination Science

“We will experience the penetration of computer intelligence. It will be embedded in all sorts of items of daily use.”

“Technology opens up a plethora of new options.”

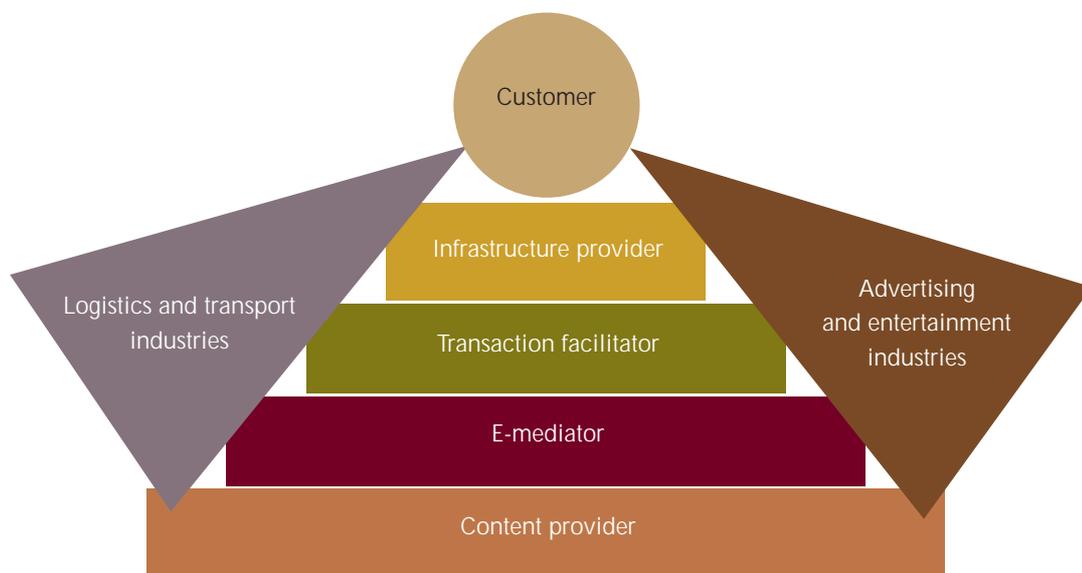
“Imagining how computers will be used in future, one ought to call it coordination technology.”

“We will have to revise the way we work and take into account the full scope of human needs.”

“We will see an increasing number of smaller companies.”

# New positions, relationships and dependencies in E-Business

*E-Business is changing the entire economic system. In the years to come, positions, relationships and dependencies in the business world are going to be shifted in an unparalleled manner and even to be redefined in part. In this process, a number of new concepts will be applied, and entire industries will be assigned new functions.*



## **The infrastructure providers**

Hardware, software, data carrier ...  
There is no business without a reliable infrastructure. Globalisation and liberalisation – especially in telecommunications – are opening up new and unheard-of ways of playing the game.

## **The transaction facilitators**

How do electronic customer payments make their way to our account? How do we conclude legally valid contracts online? How can we recognize banks that merely pretend to be banks? Transaction facilitators (e.g. payment or certification services) will make it all possible.

## **The e-mediators**

The function of electronic mediators has not been given due attention so far. On the one hand, they make life easier for end users in cyberspace by providing them access to contexts of issues extending across companies, industries or countries. On the other hand, they open access for content providers to clearly specified customer segments. In other words: e-mediators hold the key to customer loyalty!

## **The content providers**

Content providers are owners and suppliers of goods, services and information. They depend on strategic alliances with e-mediators in order not to run the risk of being ignored in the oversupply prevailing in a networked world.

## **The advertising and entertainment industries**

Advertising and entertainment will gain in significance since direct links between suppliers and users will be required even outside the electronic realm.

## **The logistics and transport industries**

Here is a critical factor in electronic business: how fast, how safely and at what price will electronically ordered merchandise be shipped to recipients? In addition, it might be worth considering to entrust logistics and transport partners with stock-keeping and inventory management, too.



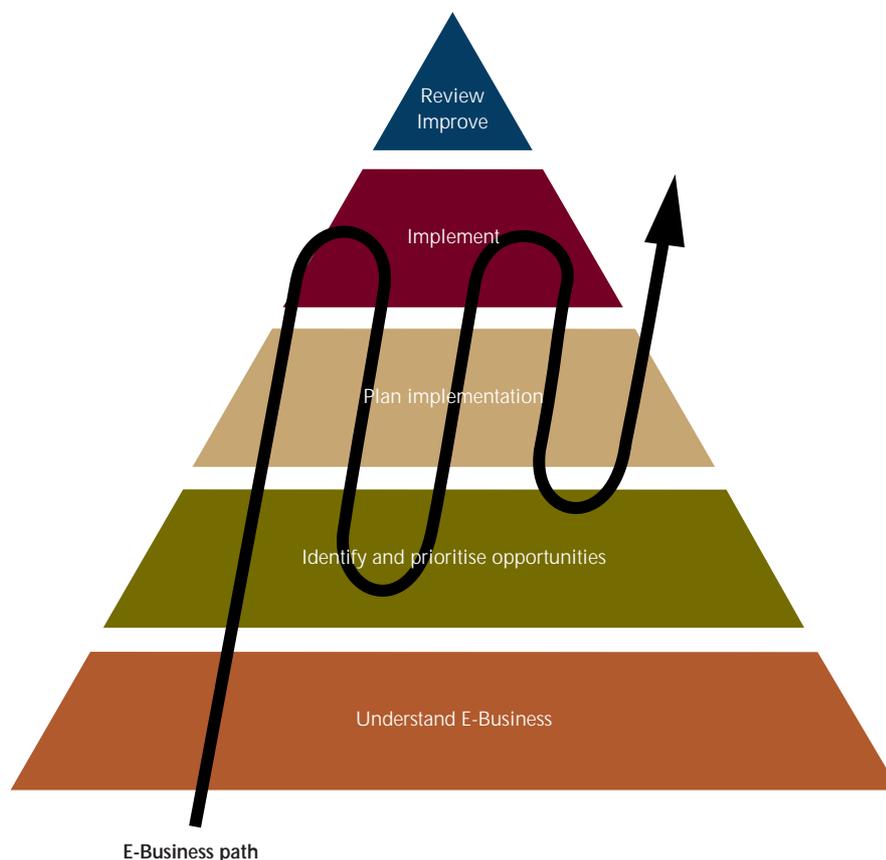
# E-Business is a major journey in several stages

E-Business is more a journey than a project. Experience shows that there is no such thing as a straight road to being an "E-Business company". There is no way of knowing in advance what final destination will be the right one for your company. Technological changes are simply too fast, and action and reaction by market players too difficult to predict. It is more promising to adopt a dynamic approach generating quick

learning effects and, thus, directly addressing the ever-present insecurity. It all starts with ideas, which are, for instance, put to work rapidly as prototypes. With the findings gained from such an experience, you will get a concrete impression of the basic ideas and the results to be expected. You are in control of the further procedure, reducing your entrepreneurial risk. In this manner, an E-Business project

advances incrementally. From the point of view of management, it is essential:

- to tackle E-Business with an approach covering the entire company
- to set priorities in order not to create stand-alone solutions and not to get stuck in dead ends
- to define clear business objectives and performance criteria



# Integration is the be-all and end-all of E-Business

This is the prime message PricewaterhouseCoopers have for their clients: E-Business is not a matter of technology but merely a door-opener towards new fields of business, more efficient structures and leaner processes. What a company requires to make it stand out from the crowd in the market and to create additional customer benefit is ideas and a vision for new and innovative business models.

This is precisely where the strength of PricewaterhouseCoopers as a global consultancy lies. We keep track of developments worldwide, adding to our know-how as we go along. This puts us in a position to design new and promising business schemes in co-operation with our clients – and not just on a piece of paper. Because we have the experts required to ensure full implementation.

In E-Business, one-sided considerations may result in inconvenient surprises, especially in areas nobody thought of from the outset. PricewaterhouseCoopers's specialists in E-Business co-operate closely with other consulting divisions in order to cover all aspects of E-Business.

## **E.g. tax advisory services**

When, for instance, engineers from various countries and companies co-operate to devise an aircraft through internet, the question arises as to which company's headquarters applies for taxation of the services provided. What is the basis for calculation of charges? Our tax specialists know how best to deal with the tax aspects of such and other commercial projects before a company is faced with tax claims.

## **E.g. legal services**

How about the legal validity of agreements concluded electronically? What material is banned from publication on internet? What precautions must be taken by law with respect to data security? Basically, the virtual world is not subject to laws different from the real one but many questions remain unanswered as far as application of those laws is concerned. Our experts know where and when you need to be cautious.

## **E.g. performance improvement**

In most cases, E-Business projects produce genuine benefits only once processes and organisational aspects are challenged. It is only through innovative business models and processes that full use can be made of the new technological options. A process re-design can be a way of laying the foundation for tremendous cost saving.

## **E.g. IT implementation**

Worldwide presence means that IT systems need to be available around the clock 365 days a year. This is very challenging for the IT infrastructure and, above all, for business organisation. Systems management is faced with new tasks. What is more, response times must be such that customers are able to satisfy their needs quickly. And all those requirements need to be met with an integrated approach.

## **E.g. operational systems risk management (OSRM)**

With the advent of E-Business, information technology is becoming even more of an Achilles heel for a company. The new form of permeability also presents new routes of attack for trespassers (hackers, viruses etc.). Human error and technical failure may put data security at risk and give rise to expensive repair work. Deficient monitoring tools may fail to prevent dangerous errors. Our OSRM specialists investigate all those risks and take appropriate measures to safeguard your company's chain of value creation.

# The bottom line

## **Success**

*Open up your strategy. Innovation and integration are key. Set clear business objectives.*

## **Evolution**

*There is no stopping E-Business. Get ready for your E-future now.*

## **Experience**

*Go for a dynamic approach to give you control over imponderabilities. Ask for advice in assessing opportunities and risks.*

## **E-Business**

*Electronic business is an entrepreneurial challenge. Therefore, it is a management responsibility.*

# PricewaterhouseCoopers – Integrated Management Consulting

PricewaterhouseCoopers is the world's largest company providing consulting services for integrated business management.

PricewaterhouseCoopers supplies global, national and local clients with a comprehensive offer in the fields of

assurance and business-advisory services, management consulting services, tax and legal services as well as financial advisory services, with national boundaries not allowed to get in the way. Given its specialisation in various industries and markets, PricewaterhouseCoopers is flexible enough

to tailor services to client needs, in particular in the middle market. PricewaterhouseCoopers detects trends early on and makes sure its clients do not have to take care of anything but their core competencies.

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