



White Paper Seamless Communication.

Seamlessly functioning communication.

.....  Systems

At one glance.

3	1. Introduction
4	2. The starting position of most companies
4	2.1 Many devices – large inefficiencies
5	2.2 Medium-sized companies are increasingly planning remote access
7	3. Customer requirements and their fulfillment
7	3.1 Flexibility, scalability, financial advantages
8	3.2 Flexibility of the company and its employees
8	3.3 Mobile Device Management
8	3.4 Security
9	4. Convergence – Communication of the future
9	4.1 Convergence on different levels
11	4.2 Status and trends of convergence
12	5. Many applications for seamless communication
12	5.1 Seamless Voice
13	5.2 Seamless Data and Seamless Application
14	6. Adding Value with Seamless Communication
15	7. Areas of competence of the telecommunication providers
15	7.1 Fixed network operators
15	7.2 Mobile network operators
15	7.3 System integrators
16	8. Outlook
17	List of Abbreviations
19	List of Figures
20	Sources

1. Introduction.

Ever more companies are facing increasing customer requirements. Bids are expected immediately, shorter delivery times are understood, quality, service, and presence must be first rate - in short: The speed is increasing. To meet this challenge, companies have to become more efficient. More and more employees, therefore, use transit time to handle administrative and productive tasks. This works especially well, when they can access the data and communication systems of their company, just as if they were in the office. Such an inclusion of mobile employees is the condition for the necessary improvement of the company's efficiency.

Up until now, media discontinuity posed hurdles for this connection: Within the company, communication is handled mostly via fixed net systems, while on the road mobile telephony is the technology of choice. The two communication spheres which have grown in parallel, hindered a common communication and information supply. In addition, the efforts for maintenance and management of different networks and terminal devices are cost-intensive and demanding.

The ideal solution would be a communication environment which merges both worlds seamlessly. Seamless Communication does just that: Its service platform includes mobile and stationary terminal devices and uniformly offers performance characteristics of modern telecommunication systems, e.g., answering machine, transfers, conference calling, etc. Seamless Communication does not require a complete hardware and infrastructure change, but it suffices to upgrade existing hardware and infrastructure.

There are already some solutions for addressing cell phones as extensions of a telephone system. Today, step by step, fixed and mobile networks are being assimilated, and the additional services and terminal devices converge.

For companies this means that their mobile employees will soon be able to call seamlessly on mobile and fixed networks and that they will be able to access data inventories in the company network remotely.

2. The starting position of most companies.

The various technologies available and used today are rather confusing. For many companies there is uncertainty when choosing the appropriate components. Additional insecurity is caused by the short life-span of technological standards. The market is characterized by individual components or insular solutions. Rarely do you find fully integrated solutions in companies today. Nonetheless, competent TK-Operators - even based on these individual systems - are able, today, to develop converging and secure solutions for the future.

The vast variety of applications, devices, and networks goes hand in hand with numerous media discontinuities and thus prevents an efficient progress of the company processes. The employees often use several different terminal devices for communication:

- a fixed network phone, which is connected to the phone system of the company
- a mobile phone for mobile voice communication
- a laptop for on the road for local but also networked work; it is connected to the company network via WLAN, DSL, UMTS/GSM or analog modem.
- a fixed desktop at the workplace, which is included in the company infrastructure
- sometimes an additional separate organizer (PDA).

2.1 Many devices – large inefficiencies.

Despite this equipment, the marketing research institute Sage Research states that especially the mobile employees at 56 % of the interviewed companies are not immediately accessible at least once a week, and initial attempts of contact are failing daily at 36 % of the companies. In this regard, Forrester Research found that the lack of accessibility of decision makers at 27 % of all US-companies lead to delays in the business processes several times per week and caused deadline problems. [Source: Unified Communication – Kommunikation der Zukunft.].

Many companies try to solve this deficit by upgrading the terminals they use but don't achieve anything other than another upgrade in complexity, cost, and overhead. Only a uniform converging solution can increase the accessibility of employees by assuring their inclusion in the company's infrastructure at any time and at any location.

2.2 Medium-sized companies are increasingly planning remote access

Given this background, convergent solutions of fixed and mobile network are at the top of the company's agenda, according to a study conducted by Trommsdorff und Brüner. Right behind VoIP (Voice over IP), fixed mobile convergence or Seamless Communication ranges second in user interest, but so far it is only used by two percent of all companies (see Fig. 2).

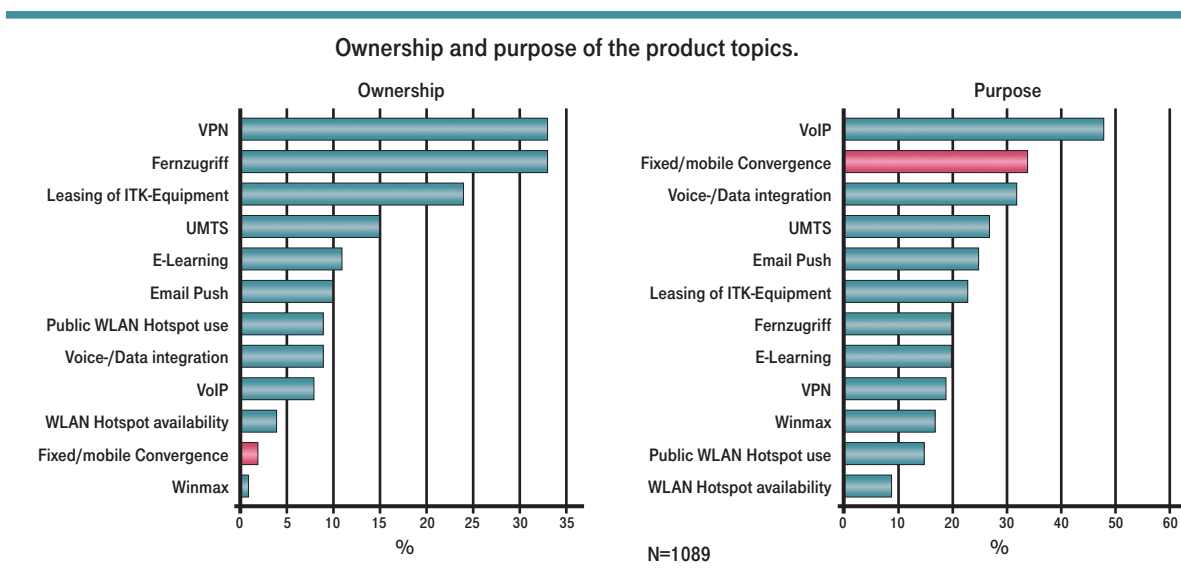


Figure 1: Ownership and purpose of the product topics [Source: Benefit GK 2006 - Trommsdorff und Drüner, Berlin].

The Experton Group, too, recently conducted a Convergence Study and found that besides the voice-data-convergence, especially the fixed and the mobile networks will drastically change the market and the business models of the telecommunications operators.

Today, already over 53 percent of all companies in Germany are using a mobile dial-in solution into the company network. Such solutions, however, must be seen as isolated solutions, which are operated separately and which use only one communication path: e.g., the dial-in from a laptop into the company network via a UMTS-Data card.

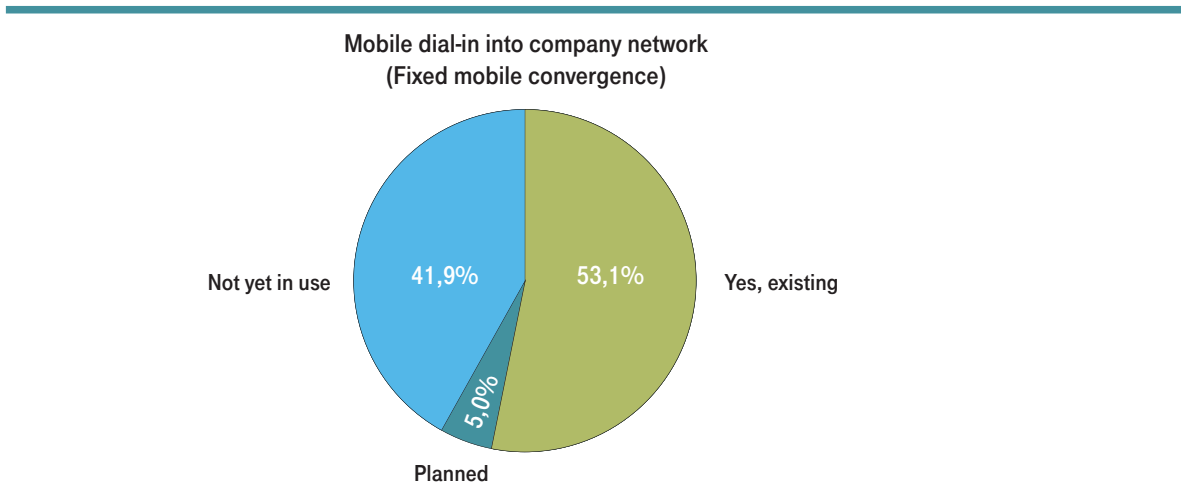


Figure 2: Mobile dial-in into company network [Source: Techconsult, Individualanalyse 2006].

Nowadays, in medium sized companies the fixed network is still dominating for dialing into company 's intranet. Large companies, however, are using Remote Access via mobile telephony. The market researchers predict that this solution will soon gain in popularity with medium-size companies, due to more attractive pricing of mobile data transfer.

3. Customer requirements and their fulfillment.

In a global world with increasing networks mobility is the key to success. No company, no matter what size, can afford to offer its employees and customers only limited communication options. Communication becomes a basic condition and offers potential competitive advantages.

For instance, it is possible for employees to access the intranet from the airport or the train, to work on emails and to download product information. By accessing the customer file, they are able to prepare adequately for the next customer dialog. At the customer 's location it is possible to quickly download the latest product flyer, which might not have been available at the time of departure. Also, the employees are offered the same functions at home as at work.

3.1 Flexibility, scalability, financial advantages.

These scenarios become reality with a converging communication landscape and Seamless Communication. The starting point for a modernization of the communications landscape towards convergence is usually the company network, before access to it for stationary and mobile employees will be organized. Currently, IP-Network-Services, e.g., IP-VPNs are experiencing very high growth rates. The high attraction of virtual private networks via the internet is based on characteristics like flexibility, scalability, security, and cost advantages. A recent study by Experton Group about the topic of Convergence shows that IP-Services using the internet in companies, e.g., IP-VPN, are replacing more and more dedicated network systems. In order to access the company resources via the Internet, several technologies are used today to include mobile employees.

With these, the focus is no longer just the attempt to achieve lower costs by simplifying the administration but especially the new possibilities of a seamless communication, i.e., an increase in productivity by increased flexibility. As the Experton study has also shown, the user wants to be independent from a certain network technology and wants to be able to combine several services. They don 't want to be tied to a certain device type, but want to be free to choose. Important to them are also so-called presence features which show at one glance which colleague is available, e.g., to answer a customer call. A seamless transfer of calls from cell phone to a DECT - or fixed network, is also something on the wish list of most companies. The deciding factor is how these services are being offered.

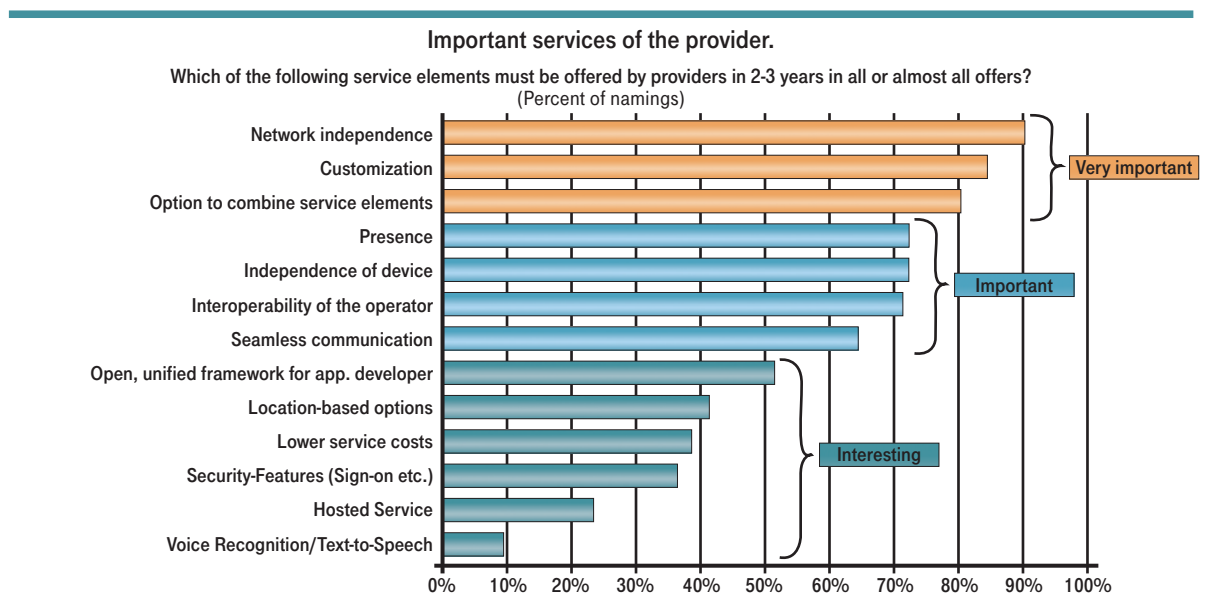


Figure 3: Prioritizing of services of the service providers.

3.2 Flexibility of the company and its employees

For 2009, IDC predicts 878 million mobile employees worldwide. Companies need to support this group of employees with the most current information and relevant knowledge for their work. In this context it is most important to connect the mobile employees at all time with the company networks, to assure communication and current levels of knowledge but also to provide the latest software on mobile devices.

Convergent communication solutions enable just that. They allow companies also to optimize their business processes by using mobile solutions. Some processes aren't even possible without the use of mobile technologies: e.g., automatic inclusion of local information. The company becomes more flexible, since certain knowledge components for actions by employees become accessible from remote locations via connections to the company's intranet. In addition, employees become more accessible due to the integration of fixed and mobile networks.

Mobility also improves: Real mobility means that the employee in the field or at the home office can access the ICT-world just as well from there as he can at his work station in the company. Virtual mobility means to communicate and work together with partners all around the world, just as if they were present locally. By having one common number for mobile and stationary phone the communication hurdles are minimized, employees and experts are always accessible wherever they are and when their expertise is needed.

These and other applications increase the value-added contribution of each individual employee. Thus, the company's processes can be accelerated while overhead costs are reduced at the same time.

3.3 Mobile Device Management.

At the same time, as the company increasingly uses mobile devices and different terminal device types and operating systems, the IT department is faced with higher demands of Mobile Device Management. There are important administration tasks to be considered, e.g., software distribution, remote configuration, inventory of hardware and software, backup and restore tasks, and security of the terminal device (e.g., encoding or deletion of all data in the case of theft/loss), tasks which are best handled centrally from afar (remotely) or "through the air."

Within the framework of fixed mobile convergence seamlessly integrated solutions may also reduce the management requirements of the mobile infrastructure. There are by now numerous solutions which handle these tasks inclusively and reduce the workloads of the IT departments, e.g., with self-service-systems.

Furthermore, only one phone system will have to be managed for both fixed and mobile network applications. For the mobile data application all employees can use standardized notebooks, each with integrated data card or smart phones and VPN-Client-Software, achieving scaling effects at the same time.

3.4 Security.

Some companies are still very reserved in regard to using Seamless Communication, because they fear security risks. Today, comprehensive "Carefree-packages" are, however, already the norm: System integrators are able to implement complete solutions which are optimally tuned to each other and which include security and administration components.

4. Convergence – Communication of the future.

A Seamless Communication platform integrates fixed and mobile technology, information technology, and traditional analog telephone technology. The integration of fixed and mobile networks is also called Fixed Mobile Convergence (FMC).

Seamless Communication aims to alleviate the currently existing difference and media discontinuities between mobile and stationary networks and services and to provide a uniform communications environment. This offers the possibility to communicate simply, comfortably and inclusive of different technologies.

At the core are the interests of the users: Even if networks are setup in the most complex manner and constructed and structured in many ways, it must still be easy for the user to communicate, no matter which network he uses. That is why from the user perspective the term “seamless communication” has been created. In order to warrant such simplicity, providers of Seamless Communication offer suitable platforms which integrate the different existing technologies. In conjunction with Remote Access solutions - the option to access the company’s network with different terminal devices from the field - a communication environment without media discontinuities is being created.

The advantages of a Seamless Communication solution are numerous.

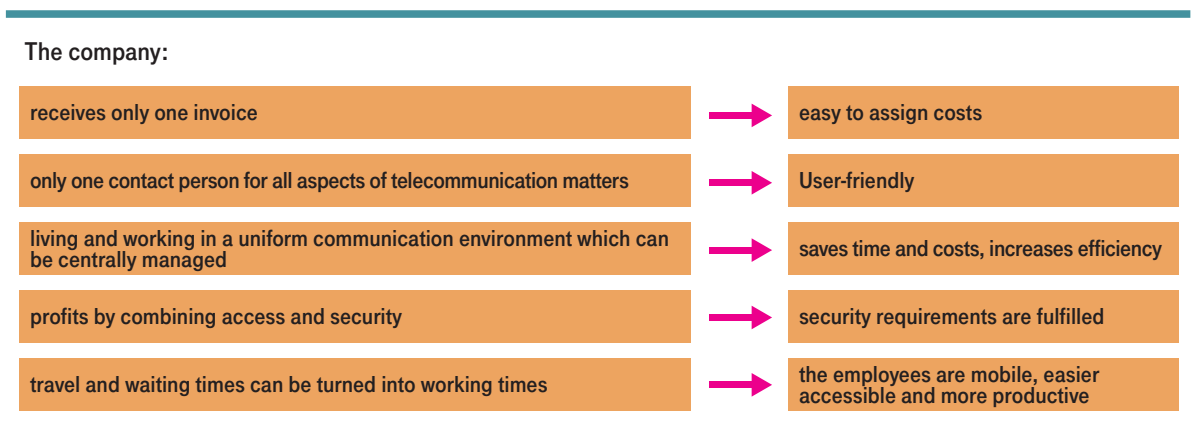


Figure 4: Seamless Communication as used within a company

In this way, Seamless Communication provides the necessary mobility for the user. While integrated services offer more comfort. The financial side is also attractive: By converging the networks, there will be only one provider to contract with, which cuts costs and overhead for the infrastructure.

4.1 Convergence on different levels.

Within the realm of Fixed Mobile Convergence, there are different levels of convergence which have progressed differently. Below find a list sorted by progressive degree of convergence:

1. Network level
2. Service level
3. Tariff level
4. Terminal device level
5. Application level

The trend towards converging solutions starts at the network level. Many services built on that, are already integrated and may already be partially included in the accounting. Overall, convergence is least implemented on the tariff, terminal device, and application levels. Complete Seamless Communication will be possible, once convergence has been implemented throughout, from the service level up to the application level. However, today, just the numerous intermediate levels result in large efficiency gains and improved employee productivity.

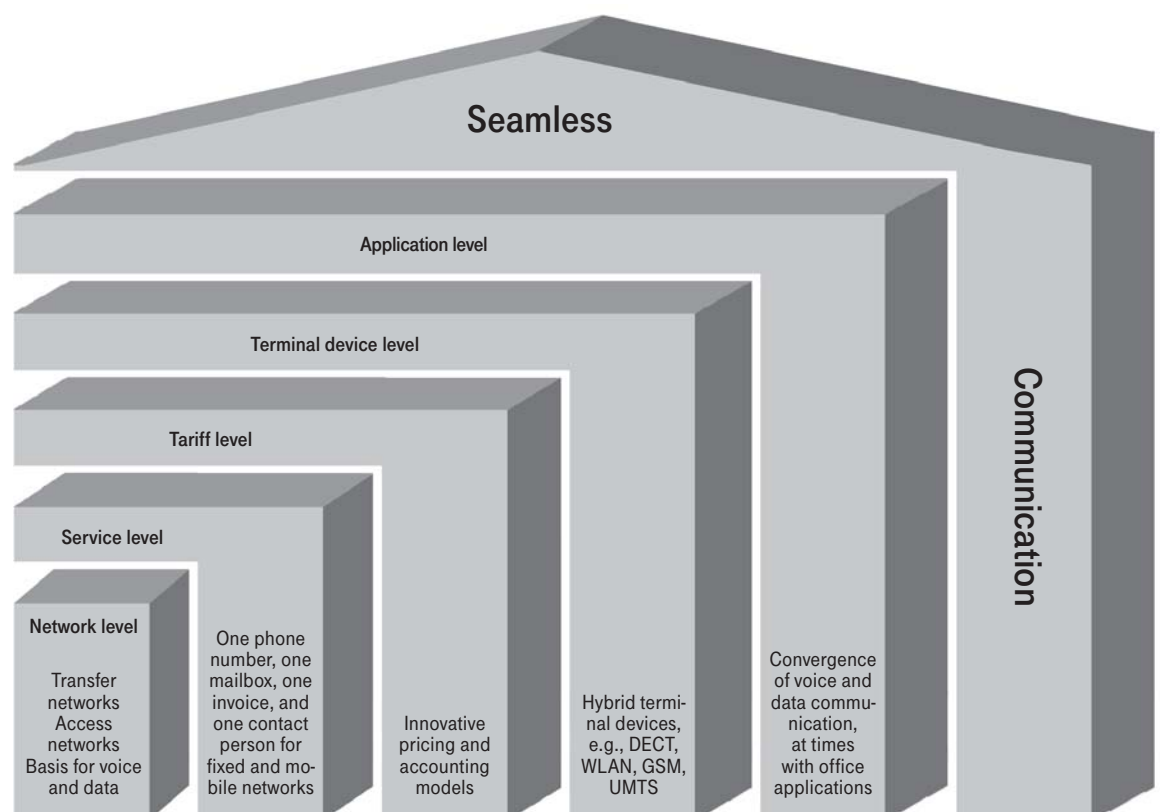


Figure 5: Seamless Communication - Model of Levels.

1. Network level.

The network level consists of the access and transfer networks. It forms the basis for all voice and data services as well as the additional and value-added services based on these. At this level, convergence means merging communication media with different transmission technologies: e.g., local, city, and long distance networks, fixed and mobile networks, line and package-transferred networks, IP-networks, etc.

2. Service level.

Convergence at this level allows for instance that the fixed network phone and the cellular phone become accessible under one common number. Seamless Communication Services primarily merge existing services into simpler solutions. They combine advantages of fixed and mobile worlds and include ultimately also the personal "home sphere" of the user.

In a converging service world, there is only one phone number, one mailbox, PIN synchronization, and only one invoice for all services which are implemented on the service level. Sales and customer care from one source.

3. Tariff level.

When services and devices become more uniform, there must also be innovative pricing and accounting models: Based on Fixed Mobile Convergence, providers offer separate fixed-mobile-minute packages, free phone calls for the company or within the company, new pricing like mobile-radio-flat, fixed-net-flat, radio-wire-flat, and wire-radio-flat.

4. Terminal device level.

On the terminal device level the integration of the fixed and mobile networks leads to several terminal devices in one housing: A mobile terminal device suited for voice and data transfer via fixed network, mobile network, and WLAN is called a dual phone or hybrid technology. Depending on the application, the communication is handled via a radio connection (DECT, WLAN, or Bluetooth etc.) or via the fixed network or DSL. Thus, the mobile terminal device itself becomes a combination device of fixed network phone, WLAN-receiver and mobile phone. Furthermore, with WLAN-reception it is also possible to conduct Voice-over-IP (VoIP) conversations. Notebooks with mobile network interface, too, are an example for convergence at terminal device level, just like phones with TV-function and internet-access and additional mobile telephony.

5. Application level.

On the application level, voice and data communication grow together with the internet and with office applications for example. As soon as the application level is completely converged, it will be possible to buy bundles of products which so far have only been available separately from different providers. Mobile terminal devices and fixed network terminal devices for voice and data communication are being merged.

4.2 Status and trends of convergence.

Convergence efforts are on the way on all five levels and some have made great progress already. In regard to the network convergence the trend, driven by data communication and VoIP, is leaning towards IP-based network. Consequently, TK-systems will be converted to IP-based TK-systems which will offer additional mobile functions, e.g., the inclusion of cellular phones.

In the area of mobile terminal devices, the trend appears to go towards convergence of equipment, so that instead of PDA as organizer and cell phone as phone, only one device, e.g., a Smartphone will be used for both purposes. Also, in the area of mobile terminal devices, the trend is to support different communication networks, e.g., UMTS and WLAN.

On the **Service level** the trend is towards a uniform communication platform, making email and groupware systems accessible on a mobile basis: It is called Unified Communications (UC.) The integration of the individual services into one solution has the additional advantage for the customer, that services will be unified, too. There will be only one contact person and one invoice, which simplifies the administrative processes on the customer side tremendously.

Within the **Mobile radio communication area** the trend is higher bandwidths and thus faster data transfer. Examples are HSDPA/HSUPA and EDGE. The prices in this area are becoming more attractive all the time and are feeding wider distribution and use of these services.

5. Many applications for seamless communication.

Seamless Communication makes voice and data communication mobile, improves the accessibility of the employees and offers a series of options, to improve business processes and procedures. Companies profit from new applications, resulting from the seamless integration and save costs based on the simpler administration and a unified communication environment.

5.1 Seamless Voice.

Seamless Voice ties cell phone together with office phone and the cell phone becomes a mobile TK-extension. This brings the following advantages for the user:

- Any mobile phone can be included as an extension into the office phone. This function is independent from age and brand of the cell phone.
- All comfort functions of the office phone are now available also on the mobile phone. This provides for optimal handling options since calls can now be forwarded even while on the road, call-backs or phone conferences can be initiated.

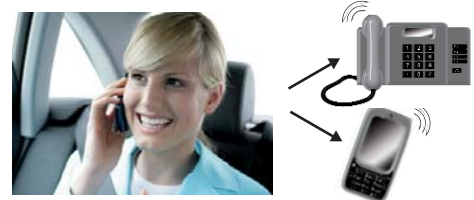
By using the mobile phone as a mobile extension another mobility “expansion” results, which means: The employee is equally accessible, globally and at his desk. Using Dual-Mode-Cell phones (WLAN and GSM enabled devices) creates a type of “campus mobility.” The employee, who moves around a lot on company grounds and within the office building, needs only one mobile terminal device and is nonetheless accessible at any time.



Figure 6: Fixed and mobile networks converge.

In addition, one unified phone number for mobile and fixed network improves the accessibility.

No more missed calls - mobile phone and office phone ring at the same time. No manual redirecting needed.



Eine Unternehmensidentität - the fixed network number is transmitted for all outgoing calls. The conversation partner therefore sees only the fixed network number. Changing mobile phone numbers is no longer a problem.



Less complexity - only one Voice Box which is integrated into the office and mobile phone. Voice messages can be recorded and sent as emails.

Figure 7: Improved accessibility based on unified phone number for mobile and fixed network.

5.2 Seamless Data and Seamless Application.

With Seamless Data the user may access the company's network at all times and from anywhere to get information. The access is independent from the type of terminal device used (Laptop, PDA, Smartphone, etc.) and from the transfer path used (GSM, UMTS, WLAN, etc.) For the highly accessible remote access to the company's network, there are already access solutions which combine a number of access paths, e.g., direct dial lines, web portals, VPN connections, etc. in one convergent product. In this way, every employee worldwide has access to his individual and familiar IT work environment and can process emails, calendar or contact dates synchronously at any time.

The immediate exchange of news is also of utmost importance to the mobile employee. For this purpose, text-based communication options are available, e.g., email, push email (direct forwarding of emails from any mailbox), SMS, and Instant Messaging (IM). For visual communication, there is MMS or video telephony. Even teleconferencing is available as a mobile function by now so that the employee may initiate a teleconference now by pushing one button while in the field.

Based on Seamless Voice and Seamless Data, additional Seamless Applications will be developed. For instance, mobile access to CRM or ERP systems is already possible. There are, however, also mobile branch applications like paper, pen & phone. With this innovative writing solution, forms can be filled out manually with a special pen, and the handwriting is captured in digital form at the same time. The pen transfers the information that was read-in via Bluetooth to the mobile phone, from where the scanned data may be transmitted directly to the IT department for further processing. Application areas for such a solution can be found almost anywhere - from banks to insurances companies, to hospitals, to the manufacturing area, to commerce and schools.

6. Value addition through Seamless Communication.

Companies use Seamless Communication to gain business advantages and these advantages are as individual as the companies themselves. Therefore, the complete profitability calculation of an investment in Seamless Communication is different for each company. Basically, the use of Seamless Communication creates quantitative as well as qualitative advantages and potential savings.

Nonetheless, companies must show concrete proof for the value of their decision to invest into Seamless Communication. Since classic ROI considerations or calculations of amortization periods as a unit of measurement do not work here, analyses of the improvements of employee efficiency and productivity as well as the important effect for the customer have to be added to the financial aspects.

Qualitative results are also factors like the reduction of media discontinuities and thus increased productivity of the employees, as well as the clearly increased customer satisfaction due to faster response times, and the improvement of the data quality based on higher actuality. The company improves its image as an advanced, modern company with motivated and committed employees. There are also advantages resulting from the reduction of the process time of procedures, from the lowering of the information distribution costs, from improved scheduling efficiency, better response capabilities in case of unforeseen events, better customer care, faster and easier information collection - this list could go on and on with specifics for each company. In general, quantitative advantages based on savings of travel, material, and personnel costs can be achieved. Other examples for potential savings are interest expenses, which can be lowered with faster invoicing and lower transfer costs due to a unified communication environment. The unified communication environment and only one invoice, create higher transparency and simple internal allocation of costs.

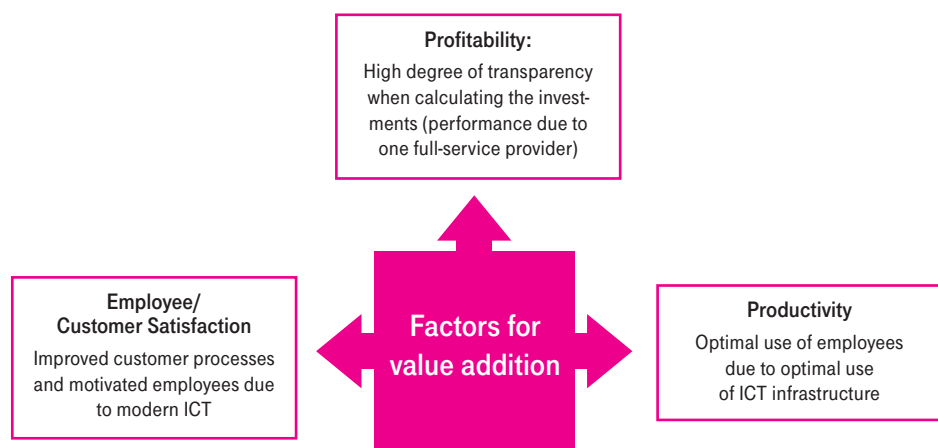


Figure 8: Seamless Communication - Quantitative and qualitative factors of value addition.

7. Areas of competency of the telecommunication providers.

To implement a Seamless Communication platform, existing hardware and infrastructure may be upgraded. The following overview provides a glimpse as to which telecommunication providers can cover which performance spectre. Because the former clear separation between fixed network and mobile network operators as well as system integrators is no longer possible. With Seamless Communication a shift in the communication sales with the individual operators is being predicted. The call volume remains almost the same, but is increasingly shifting from the fixed to the mobile network.

7.1 Fixed network operator.

■ Advantages and disadvantages of the fixed network operator:

- Advantages in the classic phone network (PSTN) and in the area "Voice over IP"
Competency depending on high availability, modernity, and less downtime of the networks, as well
- as experience in setting up complex solutions
There are many fixed network operators in the German market but only a few with their own supra-regional network
- Especially in densely populated areas, there are many small, local carriers without nationwide offers
- Modern networks provide bandwidths of up to 50 MBit/s (via DSL) as well as the excellent voice quality.
- Newer fiberglass networks have significantly wider bandwidths.
The future of the fixed network: Next Generation Networks (NGN) with connection of voice communication and data transfer.

7.2 Mobile network operators.

■ Advantages and disadvantages of the fixed network operator:

- Network autarchy Ownership of the network infrastructure
- Experience in the areas of GSM, CDMA and UMTS
Competence depends on availability (network coverage) and modern networks as well as experience
- in the market
- Smaller operators are found more in densely populated centers rather than in rural areas.
- Modern expansion stages in mobile radio technology: higher data rates, improved voice quality and availability
Bandwidths: GPRS/EDGE iup to 220 kBit/s, UMTS/HSDPA up to 7,2 MBit/s – good mobile inclusion
- in company networks is possible
Some network operators offer Wireless LAN "hotspots" as their own function.

7.3 System integrators

■ Advantages and disadvantages of the system integrators:

- System integrators combine mobile and stationary applications
Know-how in the area of the fundamental IT and middleware, in order to be able to offer services like email
- on mobile devices
- Capability to integrate different platforms on a customer basis
- Integrated, complex solutions on a customer-specific project basis for Enterprise customers
Strong relationship to general contractors through whom they find external partners for areas in which the later does not have the necessary experience.
- Know-how in integrating fundamental IP-networks for large customers
System integrators offer Seamless Communication as an outsourcing solution.

T-Systems, as a daughter of Deutsche Telekom, has a special position among the system integrators, since the company has access to the mobile and fixed network resources as well as far reaching IT-Know-How from many different branches within the conglomerate. Customers profit from comprehensive know-how, a comprehensive offers and independence from the manufacturer.

8. Outlook.

Seamless Communication has the potential to change the business life with a new type of cooperation between employees and companies. Operators will concentrate on meeting the customer 's requirements and allow for the use of cost reducing potentials created by optimized and more efficient company procedures.

Companies who plan convergence projects place top priority on operative processes, e.g., the automation of marketing, sales, and customer service, on mobile expansions, collaborative processes and customizing functionality. They expect the new converging technologies to simplify and optimize everything on the IT and business sides. A simplification of all infrastructure and network problems, a comfortable fee collection and accounting with easy to calculate, transparent tariffs or bundled offers, consistent company processes and applications and even totally new business models - all this is possible with Seamless Communication in a converging communication environment.

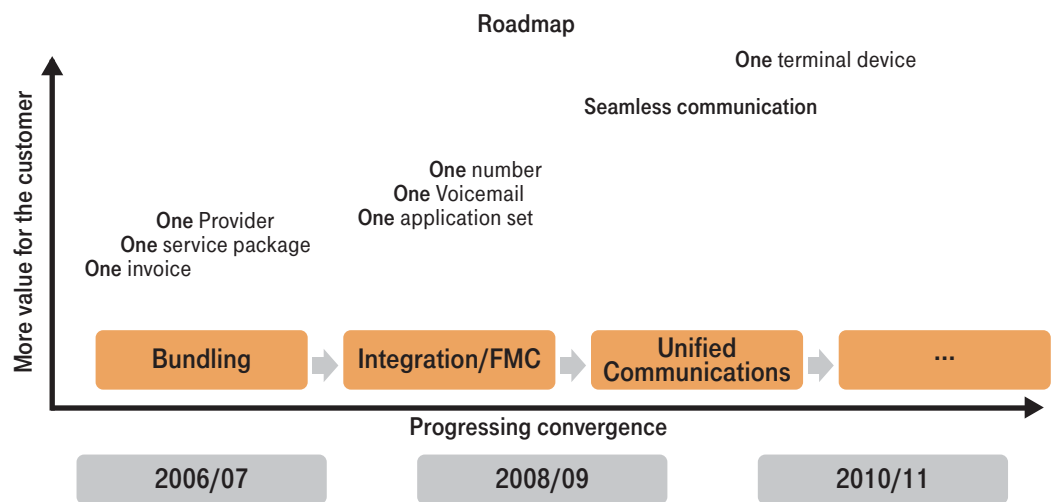


Figure 9: Future development of convergence

Future "Seamless Devices" (mobile terminal devices) will offer even more functions than are offered today and they will guarantee significantly longer power supplies. Users and terminal devices will be connected with the network at all time on IP-basis and will automatically dial into the best suited and most economical network for the respective application. In this case, the functions on the terminal device must not necessarily be offered by the terminal device itself but may draw their functionality as "Thin Devices" as a service from the network. This increases the manageability and security and reduces the costs.

Challenges still to be resolved are eventual availability and localization problems based on the freedom of locality of phone numbers as well as the lack in support of traditional devices (Fax, modem, etc.) due to a lack of converted interfaces.

Already in the near future companies will be able to use the constant inclusion of applications and functionalities like telephony, email, voice messages, Unified Communication, Conferencing, Collaboration, Contact Center und Instant Messaging in a unified network on IP-basis. The result, at the same time, will be cost reductions and better control, higher efficiency and productivity of the employees and consequently higher customer satisfaction.

List of abbreviations.

CDMA	Code Division Multiple Access
CRM	Customer Relationship Management
DECT	Digital Enhanced Cordless Telecommunications
DSL	Digital Subscriber Line
EDGE	Enhanced Data Rate for GSM Evolution
ERP	Enterprise Resource Planning
FMC	Fixed Mobile Convergence
GPRS	General Packet Radio System
GSM	Global System for Mobile Communications
HSDPA	High Speed Downlink Packet Access
HSDPA	High Speed Uplink Packet Access
ICT/ ITK	Information and communication technology
IM	Instant Messaging
IP	Internet Protocol
ISDN	Integrated Services Digital Network
IT	Information Technology
LAN	Local Area Network
MMS	Multimedia Message Service
NGN/NGS	Next-Generation Network/Service
PDA	Personal Digital Assistant
PIN	Personal Identification Number
PSTN	Public Switched Telephone Network
ROI	Return on invest
SMS	Short Message Service
TK	Telecommunication

UC	Unified Communications
UMTS	Universal Mobile Telecommunication System
VDSL	Very High-speed Digital Subscriber Line
VoIP	Voice over IP
VPN	Virtual Private Network
WLAN	Wireless Local Area Network

List of figures.

- Figure 1: Ownership and purpose of the product topics
- Figure 2: Mobile dial-in into company network
- Figure 3: Prioritizing of services of the service providers
- Figure 4: Seamless Communication as used within a company
- Figure 5: Seamless Communication - Model of Levels
- Figure 6: Fixed and mobile networks converge
- Figure 7: Improved accessibility based on unified phone number for mobile and fixed network
- Figure 8: Seamless Communication - Quantitative and qualitative factors of value addition
- Figure 9: Future development of convergence

Sources.

Detecon (Hrsg.):	2005	Win the FMC race – Nur die richtige Umsetzung führt zum Erfolg. In: DMR Heft 2/2005, S. 9-13.
Experton Group:	2007	B2B Konvergenzstudie Deutschland und International
Forrester:	2006	Telephone Cost Reduction Without the Hype
Forrester:	2006	Predictions for 2006 in the European Wireless and Mobile Communication Market
Forrester:	2006	European Wireless Enterprise: Email Accomplished, Convergence Happening, Now What?
Gartner:	2006	Fixed Mobile Convergence Drives Mobility and Productivity, Not Cost Savings
IDC:	2005	Fixed/mobile Convergence Unifying the communications experience
T-Systems:	2008	White Paper Unified Communications
Techconsult:	2006	Individualanalyse für T-Systems
Trommsdorff und Drüner:	2006	Benefit GK 2006

