

Nanyang Technological University

The Nanyang MBA



B6014 - Ecommerce and IT

Business Plan Globe Roam

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1 Executive Summary

This business plan introduces **Globe Roam** and its first product **Globe Roam Mobility**. This product enables mobile phone users with an existing mobile phone contract to do international phone calls and to roam internationally at very low cost. Since customers can subscribe with their own contract with a mobile phone operator, they can retain the flexibility to use **Globe Roam** or the service of their own network operator.

Especially *cutting down the roaming costs* of international travellers of SME and advanced individual travellers has been identified as a key leverage by **Globe Roam**, since these persons are susceptible to the high potential of money that can be saved from our service. **Globe Roam** customers can *save up to 80%* of their roaming expenditures without experiencing the hassles of getting local SIM cards abroad resulting in different phone numbers for every trip.

Financial calculations have shown that **Globe Roam's** business plan is very attractive, and a sensitivity analysis has resulted in the evidence that even a strongly reduced customer base relative to our predictions will still result in a very profitable enterprise. Even with less favourable growths of **Globe Roam's** customer base, the investor can expect a *payback period of less than two years* and achieve a *return on equity of up to 547%¹* over the lifetime of the project.

When **Globe Roam** customers travel abroad, they request a SIM² card for their target destination which is delivered by ordinary mail, express service or other means. Having arrived in the destination country, **Globe Roam** customers exchange the SIM cards in their phone and after a short login procedure, they can proceed making national and international phone calls at low cost. Additionally, they can be reached via their **Globe Roam** number that is unique in all countries where **Globe Roam** is present. Business partners and friends do not even realize that **Globe Roam** customers are abroad.

The **Globe Roam** Board consists of three capable and well trained entrepreneurs whose individual experience sums up to the necessary knowledge for establishing a High-Tech enterprise in the field of telecommunications and IT.

¹ based on the expected growth of **Globe Roam's** customer base and a project lifetime of five years

² SIM = Subscriber Identification Module, a small chip card which carries the user's identity.

2 Background

2.1 Current Industry Practice

Currently, mobile phone users receive their SIM cards from their national operators. In Europe alone, 129 different networks exist³ serving 357 million customers as per April 2002 (Chapter 13.2 visualises the breakdown per country and the growth worldwide). The underlying system, GSM, allows the users to telephone in their own country as well as abroad using the networks of associated partner operators. When users go abroad, this process is called *Roaming*. Roaming users are able to maintain their own telephone number which is important for their reachability. However, when users roam, high call charges apply to the user both for outgoing and for incoming calls. Those call charges are named *roaming charges*. Roaming charges can be 12 times as high as compared to national phone calls. Chapter 13.3 lists typical roaming charges.

Roaming is a major cash cow for the operators. It accounts for 10 to 20 percent of the operator's average revenue per user (ARPU), a sizeable amount predicted to grow as more users switch from pre-paid phones, most of which don't offer roaming abroad, to subscription models⁴. In addition, more users will experience roaming charges as patterns of mobility change. In Europe the cost of calling a fixed line from a mobile has fallen by 20 percent each of the past five years, while roaming prices have hardly moved. With only four or five competitors battling it out for market share in each country, prices haven't fallen as quickly as the regulators had hoped.

The application of the **Globe Roam** technology is to target those inefficiencies of today's industry practice which are primarily caused by the deliberate pricing strategy of GSM network providers:

- i. Prices are very high.
 - ii. Prices vary greatly.
 - iii. Customers are unable to choose the most attractive price when going abroad due to the lack of sufficient information and intransparent pricing structures.
- The choice is furthermore limited by the selection of roaming partners that the home operator offers.

³ <http://www.gsmworld.com/news/statistics/networkstats.shtml>, counting one network per license area

⁴ Currently 80% of the customers worldwide use pre-paid phones, 20% subscription

- iv. If providers in fact do offer reasonable pricings for roaming, typically the cheap rates only apply to one country (e.g. T-Mobile's tariffs for UK travellers to Australia).
- v. Consumer ignorance. Most people are not aware that they get charged for incoming phone calls when abroad.

Cheaper roaming rates are only slowly finding their way into the market place and they are the exception, not the norm. The situation above combined with the realisation of the large number of effected customers caused the **Globe Roam** idea to arise.

2.2 Business Idea and Company Set-Up

Globe Roam aims to offer its targeted customers cheaper international calls whilst at home, substantially cheaper roaming rates while abroad and a pleasant and enjoyable user experience.

Globe Roam is a new business model, which relies on the confidence and trust of venture capitalists in the first stage of business launch. Based on above described inefficiencies in the industry the management team has identified a strong opportunity for creating greater customer satisfaction with the service provided leading to a very positive short-term revenue for the company and its shareholders.

The business model will tackle the major inefficiencies of current industry practice by:

- i. Offering the most competitive rates ever charged for international mobile phone usage.
- ii. Offering a transparent pricing model which applies globally.
- iii. Pre-selecting the cheapest local operators for countries covered by **Globe Roam**.
- iv. Offering service in a large number of countries (several stages of implementation).

The key value proposition can be summarised as offering rates, which range far below **Globe Roam's** cheapest competitors.

In the initial stage, the **Globe Roam** internet venture will be undertaken as a private business funded by venture capital. Strategically this makes sense as this leaves the company and its fund raisers the maximum amount of flexibility in short-term business decision making. **Globe Roam** as a start-up company will be an attractive opportunity for a larger operator, once it

has implemented its network, achieved a brand name and created a significant customer base. Potential acquirers of the company are VoIP operators or mobile phone operators like [Net2Phone](#) or [T-Mobile](#).

Globe Roam is an intermediary business not a network operator. Hence, set-up costs are limited to building the server network and the business interface to the customer. All further costs are estimated in detail in Chapter 13.1 and incorporate marketing initiatives, sales, setup of the relations to our local SIM card providers, etc. The SIM cards themselves will be issued by local providers, so no production or regulatory issues apply in the case of **Globe Roam**.

The major investment proposition for our venture capitalist is the flexibility of implementation. Depending on the initial investment, **Globe Roam** can realise a moderate or vast growth of customer base throughout the next five years (see chapter 13.1), and in any case the payback period will range from 1-2 years. Our server architecture is scalable which means that we only invest according to the growth of our customer base. If the growth turns out to be moderate, **Globe Roam** need invest less and so compensate for the smaller expected revenue.

3 Products and Services

Globe Roam's product **Globe Roam Mobility** is a well tailored product whose key features are:

- i. Low connection fees for roaming users, both for outgoing as well as for incoming calls.
- ii. Low connection fees for international calls even in the home country.
- iii. One unified telephone number in our countries of presence (CoP).
- iv. An easy-to-use internet portal that empowers customers to access their bills, configuration and SIM card mailing preferences online.
- v. A newsletter and billing information sent to customers by email or available via internet to keep them up-to-date and informed of their usage and other available services.

A full description of the network and how **Globe Roam** can offer its services will be provided later. It is important to note at this stage that in order to be able to offer low international rates – users will be required to obtain a SIM card each and every time they travel abroad.

Low connection fees for roaming users mean that our customers will no longer have to pay the high fees to their existing network providers. Instead, they will pay prices that are similar to their national tariffs, even when they are roaming abroad.

Customers in their home country can make cheap international calls using the **Globe Roam** network shown in Figure 1. Therefore, they can avoid making international calls via domestic operators – which are costly.

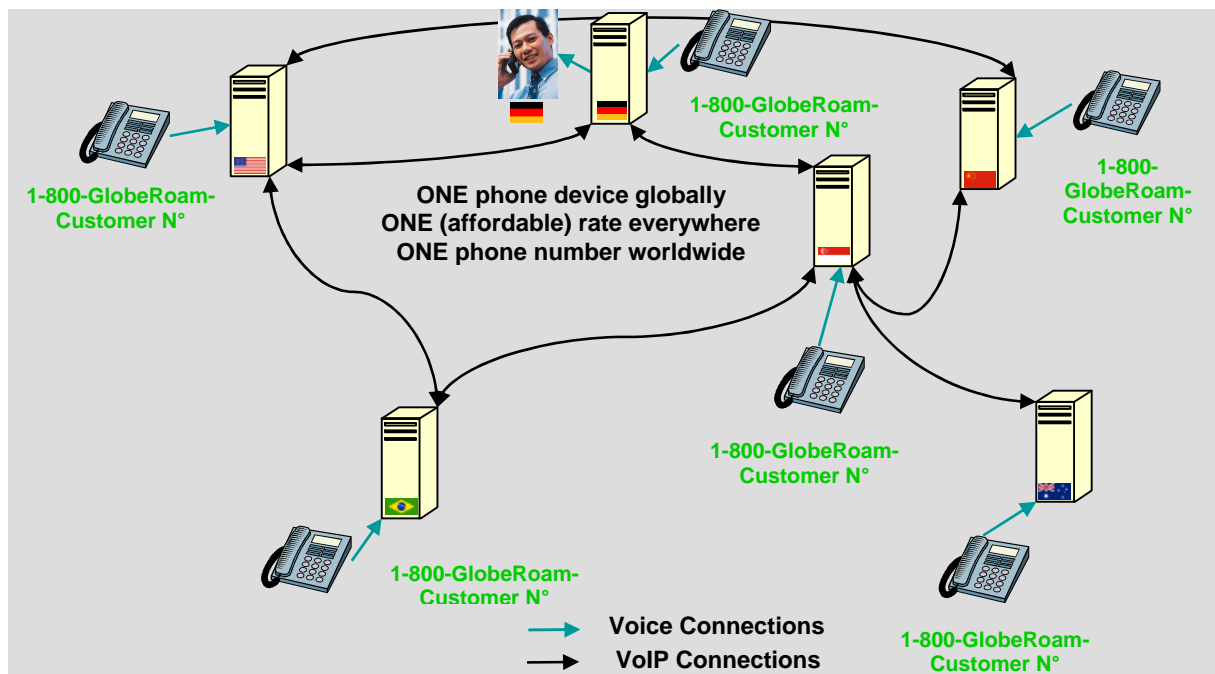


Figure 1: The Globe Roam Architecture

Our customers will receive a phone number of type *1-800-GlobeRoam-Customer N⁵* where *Customer N°* is the uniquely assigned customer number. Like this, our customers can be called in all countries of presence at local charges only.

An easy-to-use web portal will enable our customers to obtain new information, retrieve their bills and configure their options. They will be offered to order SIM cards prior to their trips abroad and to determine which mode of delivery they want to have. Possible modes are standard mail, express mail, etc. Different charges apply to each mode and these charges are billed to the respective customer.

By offering different modes of delivery at different speeds and costs – **Globe Roam** users have added flexibility and greater options. **Globe Roam** does not force its customers to give up their own existing contract with the mobile phone operator in their home country.

⁵ This feature is subject to change, and Globe Roam does not guarantee a 1-800 number in each country.

A monthly newsletter sent via email or accessible by accessing our web page, will inform our customers about their bill, methods of payment and new additions to our business activities, including the growth of the network across the globe.

These points can be summarized in the key value proposition of **Globe Roam** which is:

**Enable our clients to make high quality national and international phone
calls at low cost , anywhere⁶ and anytime.**

4 Market Analysis

4.1 Markets for Product Launch

While the service will be available in 10-20 countries in Europe and Asia once it is fully expanded, *the key markets* of **Globe Roam** for building its initial customer base will be represented by *Germany and the UK* during stage one. As investigated below in greater detail, this strategy promises a very promising number of new customers at a minimum marketing and sales investment.

In addition, **Globe Roam** will be primarily targeting the sector of small and medium sized enterprises with significant international business. They are listed in the national chamber of commerce publications and easy to target; our primary goal being to attract them to our service via email and our website.

Globe Roam's key customers:

- i. SME (small and medium sized enterprises with significant international business, e.g. travel agencies, import / export companies)
- ii. Price sensitive individual business men (Consultants, service providers, agents, etc.)
- iii. Companies, which are not in the position of negotiating with local providers (special rate agreements)

⁶ Anywhere applies to Globe Roam's countries of presence.

4.1.1 Germany

Basic Facts:

Population	82 million (2000)
GDP	2,134,205 million USD (1998)
GDP per capita	26,010 USD (1998)
Real GDP growth	0.6%
Consumer Price Inflation	2.4%

There are some 1,500,000 small and medium sized enterprises in Germany, which account for 90% of the employment and business of the country. Almost all of them use the internet as an information and communication platform. 84% of all SMEs set up their homepage (opposed to only 70% in 2001) and tend to conduct more and more business via the internet.⁷ Germany represents an especially interesting market environment for **Globe Roam** as approximately 35% of all businesses (380,000) are engaged in international business, i.e. international sales, co-operations and direct investments⁸. One third of all SME intend to expand their foreign investment in the EU⁹ countries significantly, respectively open foreign subsidiaries for business expansion.¹⁰

The SME environment in Germany is characterized by tough competition and increasingly technology-driven changes which increase cost pressures and shorten product life cycles. Due to the competitive environment, **Globe Roam** will find a very responsive market segment, which has a strong focus on cost-consciousness.

The SME sector in Germany is transparent and information on company details (i.e. address and phone numbers) is accessible via the Chambers of Commerce. **Globe Roam** will primarily focus on SMEs with international business.

⁷ http://www.contentmanager.de/magazin/artikel_189_mittelstand_online.html

⁸ http://www.ifm-bonn.org/ergebnis/153_ab.htm, IfM Bonn, December 2001

⁹ European Union

¹⁰ Deutsche Industrie und Handelskammer, <http://www.diht.de/>

4.1.2 United Kingdom

Basic Facts:

Population	59.5 million (2001)
GDP	1,357,198 million USD (1998)
GDP per capita	22,980 USD (1998)
Real GDP growth	2.3%
Consumer Price Inflation	1.8%

There are some 3,700,000 so-called micro firms in the UK. In 2001, businesses employing less than fifty people accounted for 99.2 per cent of the total stock of firms, 44.7 per cent of non-government employment and 38 per cent of total business turnover. 500,000 million of these firms can be classified as SMEs and are contributing disproportionately to total job creation in relation to their overall share of employment.

The UK represents an especially interesting market environment for **Globe Roam** as approximately 50% of all businesses are engaged in international business, i.e. international sales, co-operations and direct investment. These businesses are listed via the CBI registry and represent **Globe Roam's** premium target market. Similar to the German market environment, the SME in the UK face tough competition and increasingly technology-driven changes which drive costs and shorten product life cycles. Cost consciousness is therefore increasing and strengthening our decision to enter this market.

4.2 Countries covered by Service

Globe Roam will setup its business in two stages. In an initial stage (**phase 1**), we will cover only *Germany* and the *UK* as target markets. However, we will not only cover Germany and the UK with our server infrastructure, but a number of other countries like:

Europe: France, Spain, Italy, Austria, Belgium, the Netherlands

Asia: Singapore, Malaysia, Thailand

The selection of countries has been made according to the expected business and leisure travels of our target customers, SME employees and managers. The three Asian countries have excellent IP and telephone connections and account for a major part of Asian tourism. The listed countries are also markets with stable regulations and reliable conditions. Another interesting market is China, but this is also a difficult market due to regulations and unforeseeable obstacles. **Globe Roam** plans to enter this market once the operation in all listed countries have been set up.

In **phase 2**, **Globe Roam** will extend its customer base to the countries where we have already set up a server infrastructure and increase the number of customers without having to increase the CoP.

In **phase 3**, **Globe Roam** will then extend its operation to valuable other target countries like China, Taiwan, Korea and the US. Simultaneously, **Globe Roam** will start marketing and sales activities in these countries using the marketing, sales and technical experience gained in phase 1 and phase 2.

4.3 Conclusion

Globe Roam chose these two countries on purpose. Germany is the biggest country in Europe (as to population) and its businessmen and tourists travel abroad frequently. Most of the destinations, however, lie within the EU. Besides the EU, German businessmen frequently travel either to the US or to Asia. British businessmen, to, do most of their business with other EU countries. Both German and British GSM operators charge high prices for international phone calls originating from mobile phones, and they also charge high roaming fees for their customers who are abroad, and therefore, they are an ideal target for **Globe Roam's** product.

5 Marketing and Sales

5.1 Marketing Globe Roam

Globe Roam modifies the current process of international mobile phone calling due to the already described inefficiencies which affect the customers significantly. To justify the minor obstacles (e.g. change of SIM cards), the key value proposition (low and transparent price) needs to be clearly and sufficiently communicated in our marketing initiatives.

As the target customers during the first phase of product launch are German and English small and medium sized enterprises, **Globe Roam** will not promote the product via the traditional mass media. Our marketing strategy aims to achieve maximum customer receptiveness and maximum leverage of our limited marketing budget.

Our established website (<http://www.globeroam.com>) represents our primary tool for web advertising. In addition, **Globe Roam** intends to launch a number of targeted acquisition initiatives. More specifically, we plan to advertise our service via regional trade publications and SME magazines on a regular basis. The major aim of doing so is to draw the customer's attention on our website, where we provide more detailed and focused information about the service. In addition, we will promote our service by participating in major regional SME trade fairs and other SME-focused governmental initiatives in Germany (e.g. Nortec, Chamber of Commerce) and England (e.g. Rotary Club, CBI forums and symposiums). For implementing the described marketing initiatives, we have allocated a customer acquisition cost of 20SGD/customer.

In addition, we will have a team of 5 marketing experts who will be focusing on direct marketing via email and telephone for premium SME customer segments. They will be specialised in setting up contracts with medium sized enterprises and focus their work on the most prospective customer segments (identified via the Chamber of Commerce).

The goal of the marketing activities is to establish **Globe Roam** as a synonym for economical international phone calling at high quality.

This marketing strategy is the most efficient in **stage 1**, as the targeted market is limited in size and highly specialised. Traditionally, German and UK SME customers respond better to tailored information or personal contacts via letters or emails, rather than to the traditional mass media such as television or daily newspapers. Concerning our financial projections, we have allocated an annual salary of 40,000 SGD per marketing staff.

Another important component which **Globe Roam** plans to use is Viral Marketing. **Globe Roam** aims at total customer satisfaction, and we also want our customers to spread out the availability, quality and reliability of the service. In order to stimulate this behaviour in our customers, we will offer each customer who brings us new customers, a bonus talk time that is topped on his account and can basically be used for all kinds of phone calls in **Globe Roam**'s CoP. Details about this bonus are yet to be announced, but **Globe Roam** expects to gain a considerable marketing gain from this strategy that also has proven to be beneficial in other companies.

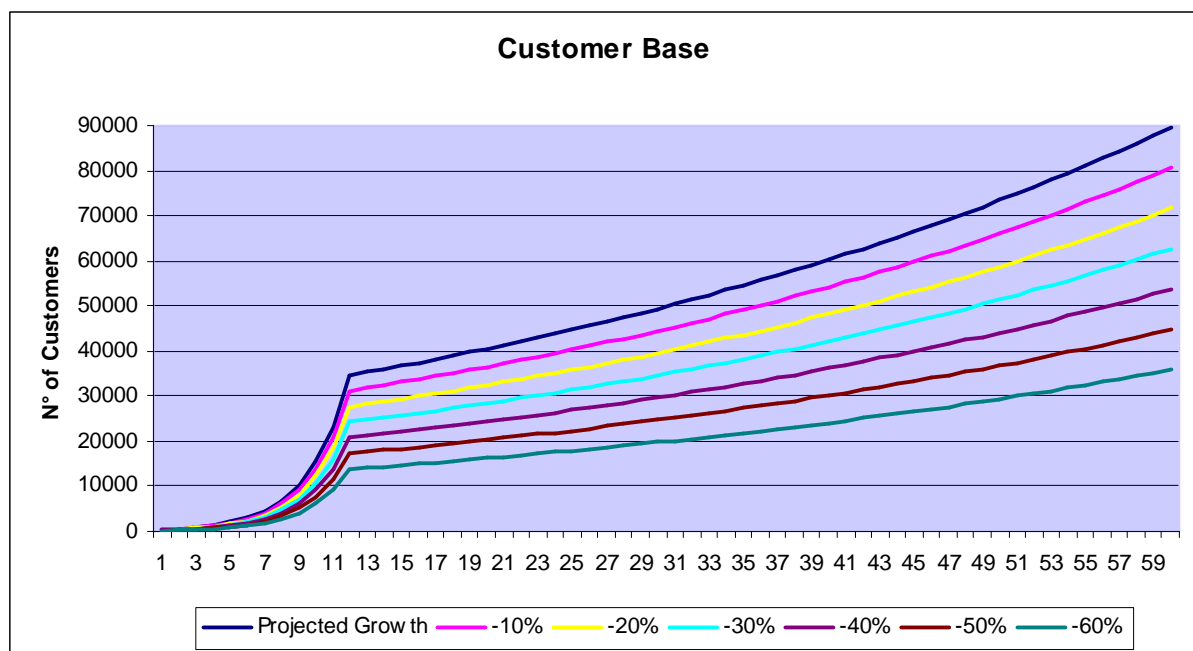


Figure 2: Growth of Globe Roam's Customer Base

Globe Roam estimates its market share among the SME sector to be around 35,000 roaming users after Year 1. This represents a conservative number of about 3,000 to 6,000 businesses and will be growing at a **monthly rate of 50% for the first year** and at a **monthly rate of 2% from the second year on**. Figure 2 highlights the growth of Globe Roam's expected customer base over the time. This figure also shows the graphs for a decreased customer base of -10%...-60% which is used in the [sensitivity analysis](#).

5.2 Selling Globe Roam

Globe Roam's primary sales channel will be our internet platform, where contractual details and respective forms are available for download. All physical exchanges of validating documentation and SIM cards will be handled via the postal services, DHL, etc. Customer Service will be provided online only.

A potential **Globe Roam** customer has to have a mobile phone which does not have SIM Lock¹¹ and a valid contract with a GSM operator in his home country. The customer then already has a valid SIM¹² card of his home operator. We will call this SIM card the *primary SIM card*. **Globe Roam** does not intend to provide GSM phones or primary SIM cards to its customers since we cannot achieve any financial benefit from this offer. When a customer joins **Globe Roam**, he signs a contract and has to pay his annual fee. After the customer has set up his access on our website, he¹³ will configure his personal details via the internet. Having finished this setup, the customer is entitled to rent SIM cards for his trips abroad.

Let's assume that a customer wants to travel to France. Our customers from SME do not plan their business trips ad-hoc; they typically know some days in advance that they are going to make a trip to another country. In that case, he orders a SIM card for the respective country via **Globe Roam**'s web page. He can choose from several delivery methods which may vary according to the country, but in general, normal postal delivery and express mail or courier services like DHL are available. The delivery is billed to the customer. He also has to pay a daily rent for the SIM cards that he borrows for his trip. After the travel, the customer sends back the SIM card by postal mail. In order to do this, he receives a free envelope together with the SIM card that he can use for the return of the SIM card. **Globe Roam** bills all phone calls that occur from that SIM card in the period that the customer borrowed it, to the respective customer. Customers are billed to credit cards only so that **Globe Roam** does not experience any delays in the payment of outstanding bills. When signing up a number of users within the same company, **Globe Roam** offers tailored packages, so that the company can aggregate charges, view usage data and budget accordingly.

5.3 Pricing Structure

Globe Roam plans to sell its services at very attractive and transparent prices for end customers. Table 1 lists the prices of **Globe Roam**. Besides the annual fee and the rental fee for SIM cards when travelling abroad, there are only three different prices for outgoing phone calls, regardless of which country a **Globe Roam** customer travels to. And these prices are

¹¹ SIM Lock is a feature where a mobile phone can only be used with a SIM card of the GSM provider who subsidised the purchase of the GSM phone.

¹² SIM = Subscriber Identification Module. This is a chip card that contains all the information of the GSM subscriber as well as a telephone book with the customer's entries.

¹³ For the ease of reading, "customer" will be substituted by "he" in the text although customers can also be female, of course. This does not indicate any preference or discrimination as to the sex of the customer.

way below of typical roaming charges that users have to pay with their current network operators. Incoming calls are billed on two different prices only.

Annual Fee		\$50,00
Rental Fee for SIM Cards per day		\$1,00
Phone Fees per min (outgoing)	Call to Fixed Line	Call to Mobile Phone
Home Country	\$0,101	\$0,401
Roaming Country	\$0,401	\$0,701
Phone Fees per min (incoming)		
Home Country	\$0,410	
Roaming Country	\$0,500	

All prices are stated in S\$ (SGD).

Table 1: Pricing Structure for Globe Roam

By keeping its price structure simple, **Globe Roam** achieves the goals of affordable and transparent communication fees.

6 Financial Projections

The projected balance and the profit and loss account are shown in the chapter 13.1.2 and chapter 13.1.3, respectively. As shown in the balance sheet, the high cash reserve is required for the business to meet the unforeseen change in the scenario and to avoid the company from a liquidity crunch.

The five year's profit and loss account shows that the business is very profitable and it is consequently worth investing in the company. The projected profit and loss account shows that, in the first year of operation, **Globe Roam** will only achieve marginal profit. The calculations have been done based on the customer growth given in Figure 2. Since most of the costs are fixed in nature, a low amount of customers will affect the business profit. However, we can see that even with 40% of the estimated customer base, the business still can sustain in the long run and generate profit.

The financial analysis in chapter 13.1.4 shows the project has an **IRR of 114%** and a **Payback Period or less than two years**. This is an excellent indication of the high profitability of **Globe Roam's** business plan.

7 Funding requirements

Total fund requirement for the business plan is 2.1 million S\$ (given in the balance sheet in chapter 13.1.2). The fund requirement of 2.3 million S\$ includes the acquisition of assets, e.g. the Main Server, the VoIP servers, the development of the website and the purchase and configuration of the required software. The fund of 2.1 million S\$ also includes the liquid cash of 1.98 million S\$. Such a large amount of cash asset is kept intentionally to meet the expenditure related to sales & promotional activities, down payment for the various contract agreements and also to meet the expenditure of the first year of operation. Out of the total amount mentioned above, only 0.325 million S\$ are required to set-up the necessary infrastructure. A detailed break-down of the cost is given in the chapter 13.1.1. To keep the initial funding requirement low, we plan not to buy all computers required for the operation, but to lease a part of the required hardware instead. Our contract with the hardware seller (on a leasing basis) will include maintenance of the computers, too. This arrangement will substantially lower our IT maintenance and operations cost. Furthermore, we can concentrate all our employees in **Globe Roam**'s headquarter, and they can focus their work on customer related activities.

We propose to raise 80% of the fund from a Venture Capitalist and the remaining 20% as a bank loan. We want to keep very low debt-to-equity ratio in order to have better solvency and to account for the higher risk that start-up enterprises like **Globe Roam** inevitably have.

8 Risk Assessment and Sensitivity Analysis

8.1 *Retaliation by Key Industry Players*

Globe Roam cannot be protected by country regulations or intellectual property (i.e. patents), nor are there any significant barriers to entry. Therefore, **Globe Roam** must survive by building up a solid customer base, provide excellent customer service and be the first to market in its segment. Our analysis shows this to be the case. In addition, by providing customers with a unified telephone number in all CoP, users are less likely to switch from our service, due to the cost, time and hassle associated with switching providers.

However, the key risk factor is clearly identified as being the direct market environment. The major threats are represented by competitors and substitute products:

i. Network operators:

With international roaming representing 10-20% of their total revenue, operators would have scope to downscale prices without doing much damage to overall

earnings. They would do this, if their competition (like **Globe Roam**) achieves a significant market share and begins to pull away customers from their profitable roaming business. However, **Globe Roam**'s initial customer base will be much too small to result in actions of the established network operators. The established network operators will compare the loss in profits if they lower the roaming charges with the loss of profit they experience from the move of their customers to **Globe Roam**, and in the initial stage, **Globe Roam** will not have such a big customer base. Therefore, a retaliation act seems highly unlikely in the short-term.

ii. New entrants with similar concept:

Globe Roam will specialise its service for a very distinct group of customers (SME's). While the market entry of new suppliers cannot be prevented, **Globe Roam** intends to beat competitors with its low cost structure and service and its experience it can build up from the initial operations.

iii. Substitute products:

Conventional Calling Cards represent a possible substitute product though they do not yet beat **Globe Roam** on price or convenience. While cards such as AT&T Direct or SingTel ICC offer low international rates – they are mainly used on fixed line outgoing calls. They are not a solution for incoming calls or for users who wish to use mobile phones frequently.

For those users who want to use their mobile phone, they could always buy a pre-paid card in the country they visit. However, this can represent a sizeable investment, if the card is used infrequently. In addition, the user will lose the convenience of having a single global telephone number.

These points are also highlighted in Figure 4.

9 Risk Assessment and Key Success Factors

A comprehensive listing of the risk assessment is given in the SWOT analysis in Figure 3. It lists the most important SWOT parameters for **Globe Roam**, however without assessing the severity of the various points.

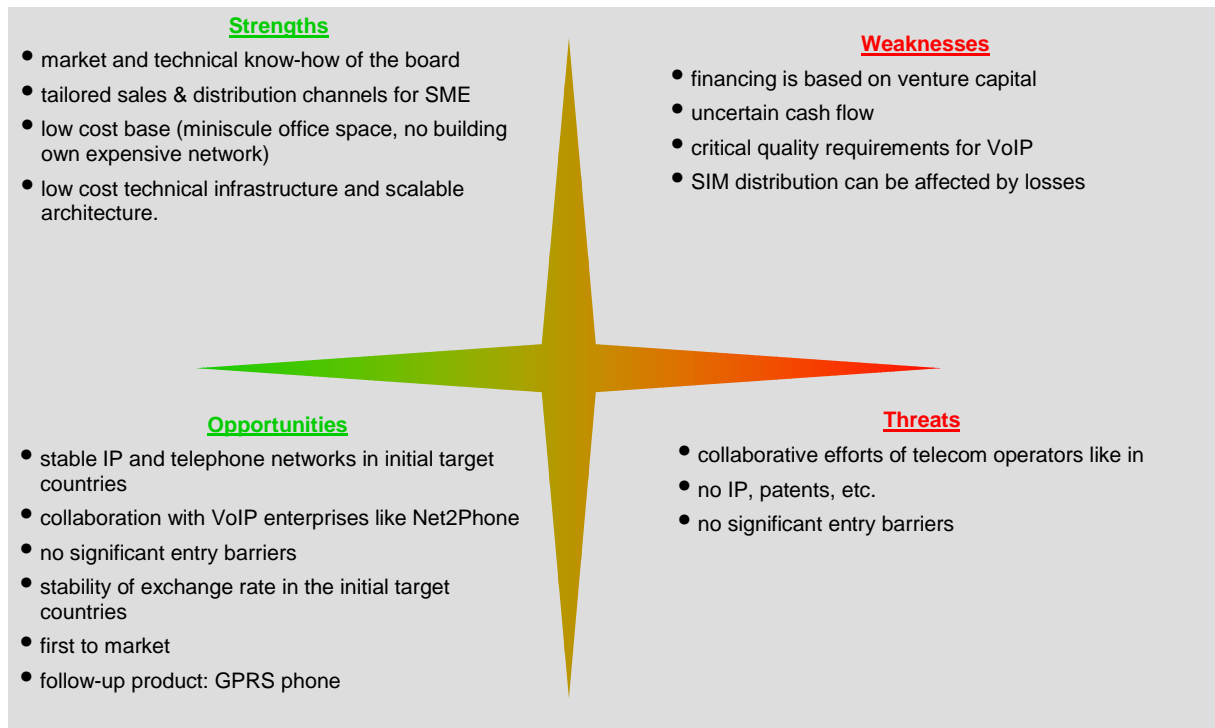


Figure 3: SWOT Analysis of Globe Roam

Figure 4 shows another type of risk analysis, which was done according to Michael Porter's *Five Forces Model*. The conclusion of this model is that there is some risk of competitive rivalry, and this is essentially listed in the chapter 8.1.

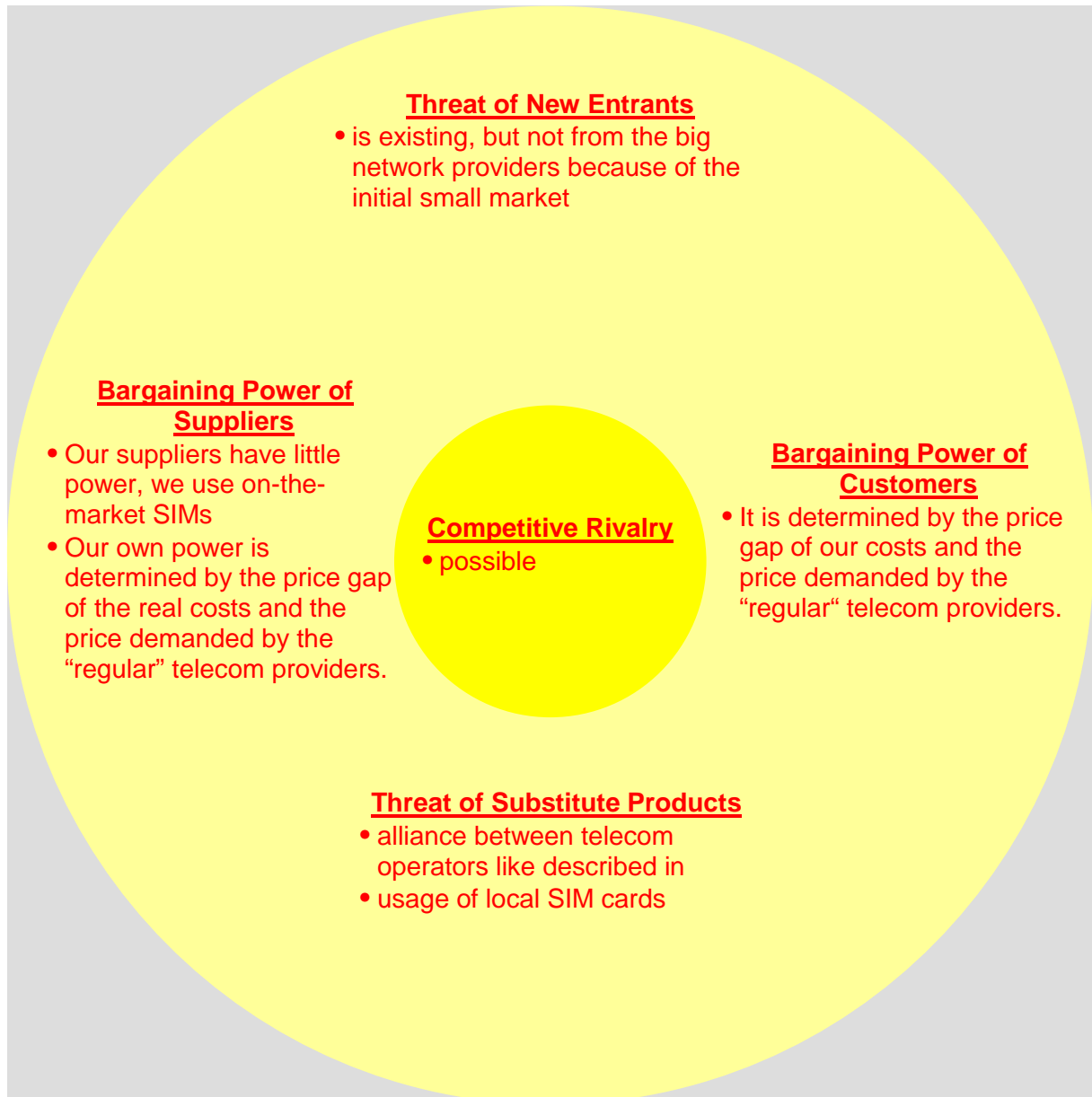


Figure 4: Risk Analysis as to Michael Porter's "Five Forces Model"

9.1 Sensitivity Analysis

Globe Roam's yearly sales and operating results in financial planning may fluctuate as a result of variety of factors. Among these factors are:

- Changes in the number of customers
- Changing in the price of roaming charges by network operators
- Technology change (innovation of new technology)
- Changes in **Globe Roam's** contract price with the ISP and the local telephone companies.

A sensitivity analysis was carried out varying the customer base from 0% to -60%, and the result is shown in Figure 5. Since the ROE values are so different for each year, the sensitivity analysis also shows the different ROE for the individual years. As we can see, the business is still profitable even if the customer base is 60% lower than what we assume in our business plan which simply means that **Globe Roam** has a lot of inherent security for the investor. It can therefore be concluded that **Globe Roam** promises a good return on the investor's capital and that **Globe Roam** is a good investment opportunity for investors who want to engage in the field of High Technology.

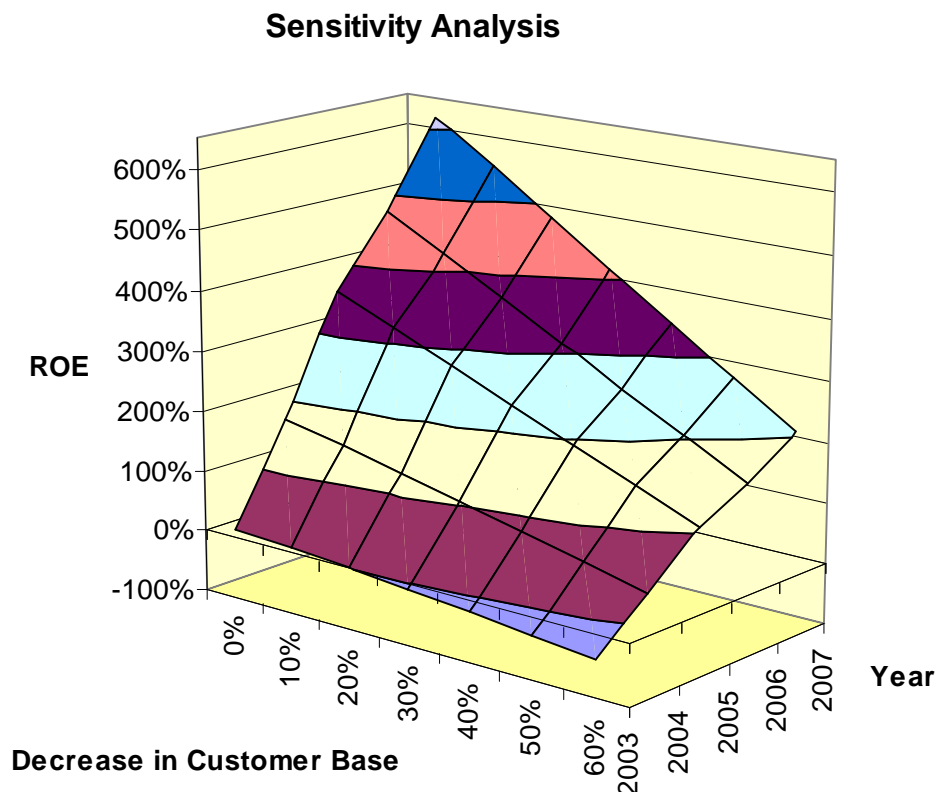


Figure 5: Sensitivity Analysis (Decrease in Customer Base with Respect to Original Values)

10 Action Plans and Milestones

Establishing **Globe Roam** requests a dedicated management team and a careful project plan that lists all necessary activities and allocates the available resources so that we can make maximal usage of the invested capital as well as of the human resources that we are going to employ. Table 2 lists all the necessary action items that are necessary in order to build up **Globe Roam** and its infrastructure.

N°	Action Item	Estimated Time	Predecessor	Start Date	End Date
1	Roll-Out of Globe Roam	122 d		2003-01-01	2003-06-19
2	M0	0 d		2003-01-01	2003-01-01
3	Fundraising for the Project	7 d	2	2003-01-01	2003-01-09
4	Phase 1: Core System Build-Up	81 d	3	2003-01-10	2003-05-02
5	Company Registration	3 d		2003-01-10	2003-01-14
6	Purchasing of IT Equipment	14 d	3;5	2003-01-15	2003-02-03
7	Negotiation of Contracts with Global ISPs	28 d	3;5	2003-01-15	2003-02-21
8	Negotiation with Telephone Provider	28 d	7;5	2003-02-24	2003-04-02
9	Rent Office Space	7 d	3;5	2003-01-15	2003-01-23
10	Equip Office with Stationary	7 d	9;5	2003-01-24	2003-02-03
11	S0	0 d	6;10	2003-02-03	2003-02-03
12	Hiring of Staff (fixed, contract, consultant)	14 d	3;5	2003-01-15	2003-02-03
13	Installation of Server Hardware	20 d	11	2003-02-04	2003-03-03
14	Configuration of Servers	7 d	13	2003-03-04	2003-03-12
15	Installation of Master Server	2 d	11	2003-02-04	2003-02-05
16	Configuration of Master Server	6 d	15	2003-02-06	2003-02-13
17	Development of Homepage and Web-Frontend	20 d	11	2003-02-04	2003-03-03
18	Development of Additional Software Components	30 d	15;16;13;14	2003-03-13	2003-04-23
19	Merging of the Software Components	4 d	18	2003-04-24	2003-04-29
20	Test of the whole system	3 d	19	2003-04-30	2003-05-02
21	M1	0 d	4	2003-05-02	2003-05-02
22	Phase 2: Market Launch	28 d	21	2003-05-05	2003-06-11
23	Campaign in Print Media	21 d	21	2003-05-05	2003-06-02
24	Contact of SME Associations	21 d	21	2003-05-05	2003-06-02
25	Hiring of Staff (fixed)	5 d	21	2003-05-05	2003-05-09
26	Installation of Server Hardware	20 d	21	2003-05-05	2003-05-30
27	Configuration of Servers	20 d	21	2003-05-05	2003-05-30
28	Set-Up of Customer Service	3 d	23;24	2003-06-03	2003-06-05
29	Technical Adjustment Phase	7 d	20;26;27	2003-06-02	2003-06-10
30	System Go-Live	1 d	29	2003-06-11	2003-06-11
31	M2	0 d	22	2003-06-11	2003-06-11
32	Phase 3: Completion of the System	6 d	31	2003-06-12	2003-06-19
33	Operational Plan for IT Equipment	3 d	31	2003-06-12	2003-06-16
34	Regulation of Data Warehousing	3 d	33	2003-06-17	2003-06-19
35	Traffic Control and Statistics	5 d	31	2003-06-12	2003-06-18
36	M3	0 d	32	2003-06-19	2003-06-19

Table 2: List of Action Items for the Globe Roam Project

The complete Project Plan is attached to this business plan.

An initial step is also the reservation of the domain <http://www.globeroam.com> which has already been done by the management team in order to secure the domain name and be able to start early with the internet portal. The remaining steps will be kicked off as soon as we have a positive commitment from an investor.

The project plan in Table 2 highlights milestones in red colour. Milestones can only be passed when a declaration of conformity can be given which certifies that all listed goals have been achieved so far. The project plan is divided into different phases which are printed in bold letters. The milestone M3 states that the system is fully operational and that the business is running smoothly with all procedures set up completely.

11 The Management Team and Organisation

The management team consists of our three experts in the field of telecommunication, technology and international marketing & sales:

[Susann Naomi Israel, CEO](#)

[Subhabrata Guru, CFO](#)

[Gabriel Rüeck, CIO](#)

Together the team combines a profound experience in the area of mobile telecommunication in Europe and Asia, expertise in managing and implementing new technologies, and a proven track record in setting up a new business and entering new international markets. More important, the management team has a strong linkage to a major industry player in Europe for potential alliances or acquisitions in the long-term perspective. Last, the past work experience provides strong understanding of the SME sector in Germany.

Name	Function	Tasks
Susann Naomi Israel	CEO	Project Control Investor Relations Planning of Headcount Representation of the Enterprise Inputs for Marketing Strategies
Subhabrata Guru	CFO	Finance Planning Financial Supervision of IT Purchasing Marketing Strategies Sales Forecast
Gabriel Rüeck	CIO	Purchasing of IT Equipment and Services Definition of Customer Service Level IT Outsourcing Data Security

Table 3: Additional Tasks for CEO, CFO and CIO

In the very beginning of **Globe Roam** when venture capital has to be raised, there are no or only a few employees, and therefore, the management team will have to take care of additional tasks that are listed in Table 3.

As **Globe Roam** attracts investors and secures its operations through stable funding, we will hire skilled employees and build up an organization as shown in Figure 6. We will have Marketing & Sales staff that deal with the initial target markets Germany and the UK and four IT engineers that monitor quality of service, improve systems performance and manage customer database information and operational systems. Additionally, one team secretary will be engaged in order to cope with the paperwork. For maximum proximity to our target

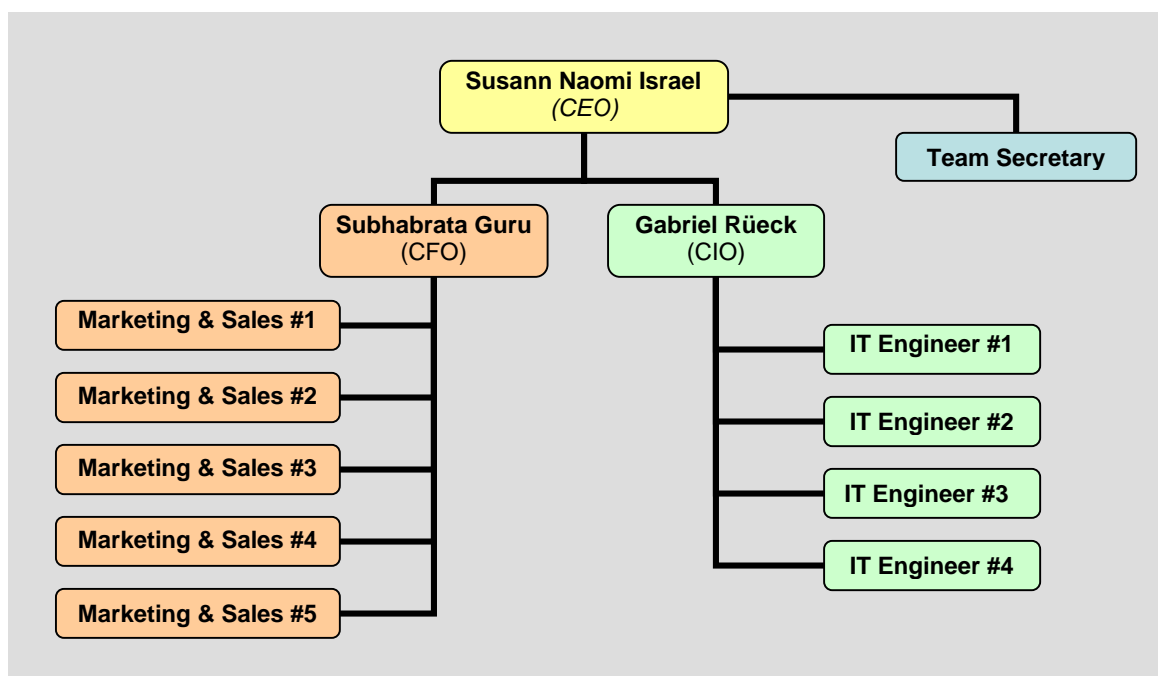


Figure 6: Globe Roam's Organizational Structure

customers and key investors, the Head Office will be located in Frankfurt, Germany.

12 The Technology behind Globe Roam

Globe Roam uses *Voice over IP* for the international transmission of its phone calls. In VoIP, speech is transported via the internet rather than through a circuit switched connection. This has the big advantage that the transmission is very cheap and readily available. The drawback is that common IP connections do not guarantee a certain Quality of Service (QoS), and the speech quality may therefore be worse than in a circuit switched call. However, some multinational operators offer IP and VPN connections for their clients that ensure a defined QoS level, and it is **Globe Roam's** goal to buy in IP connections with such a

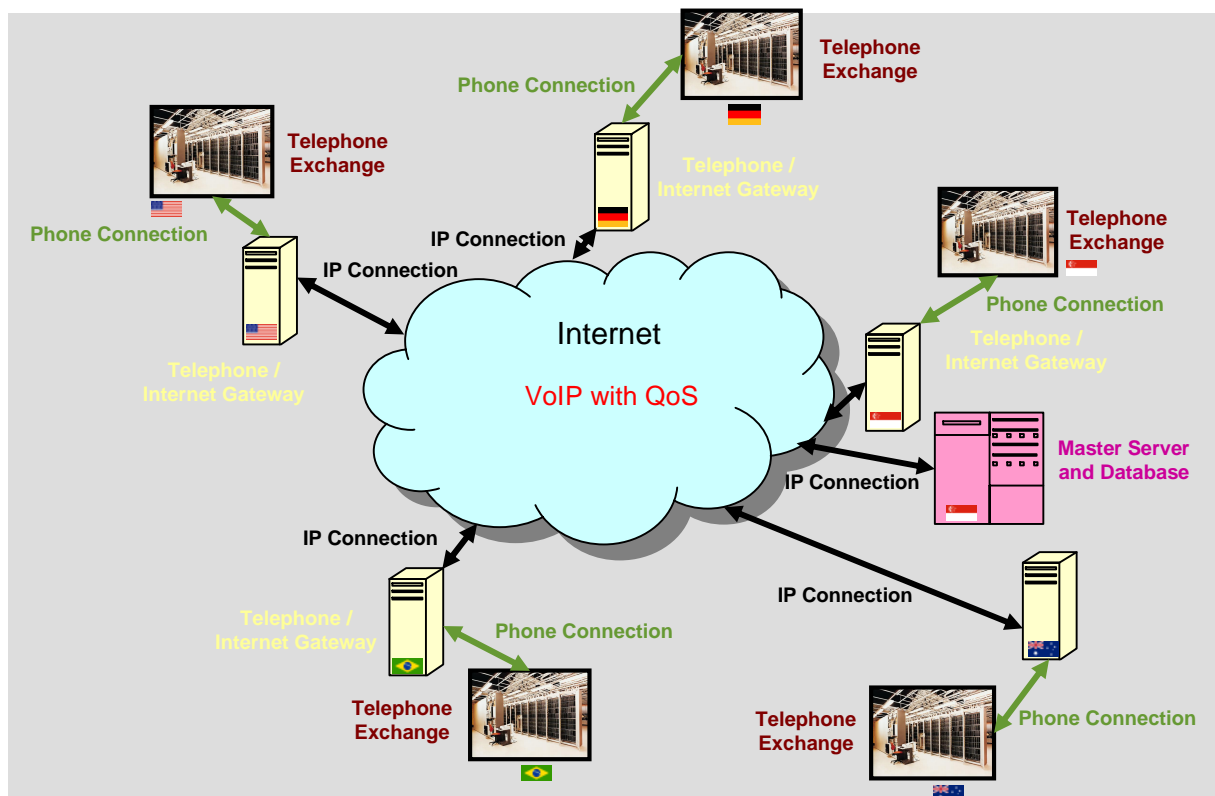


Figure 7: The Globe Roam Network Architecture

defined QoS so that our customers do not experience bad quality of voice.

Figure 7 shows the architecture of **Globe Roam's** network. We have servers in each CoP¹⁴ that interlink the country's telephone network with the internet. Each of our servers is equipped with a PRI¹⁵ controller that can handle up to 30 simultaneous phone calls. The servers are also connected to the internet, and we expect to need a data rate of 512 kbit/s in order to handle 30 simultaneous phone calls, including all the control information. The

¹⁴ Country of Presence

¹⁵ Primary Rate ISDN, this is a bundle of 30 voice or data channels together with one control channel.

servers for one country are physically hosted in a computer centre of an ISP. We also find one Master Server that holds all the user data, does the billing and hosts the website for our customers. In reality, this Master Server will be only one machine at the beginning, but later be scaled according to our customer base and the machine load. Regular backups ensure data integrity and provide safety against system failures.

While this system architecture may appear complex and expensive, it enables us to tackle a number of situations in which our customers can benefit and which ultimately fuel our business. Figure 8 and Figure 9 show the typical application scenarios of **Globe Roam**. In this figure, we have the **Globe Roam** solution on the left side and the current (expensive) solution on the right side of the diagram. The black arrows are the cheap **Globe Roam** connections, whereas the thick red arrows highlight the connections which have a high cost in the current system of mobile telephony. Five scenarios are displayed.

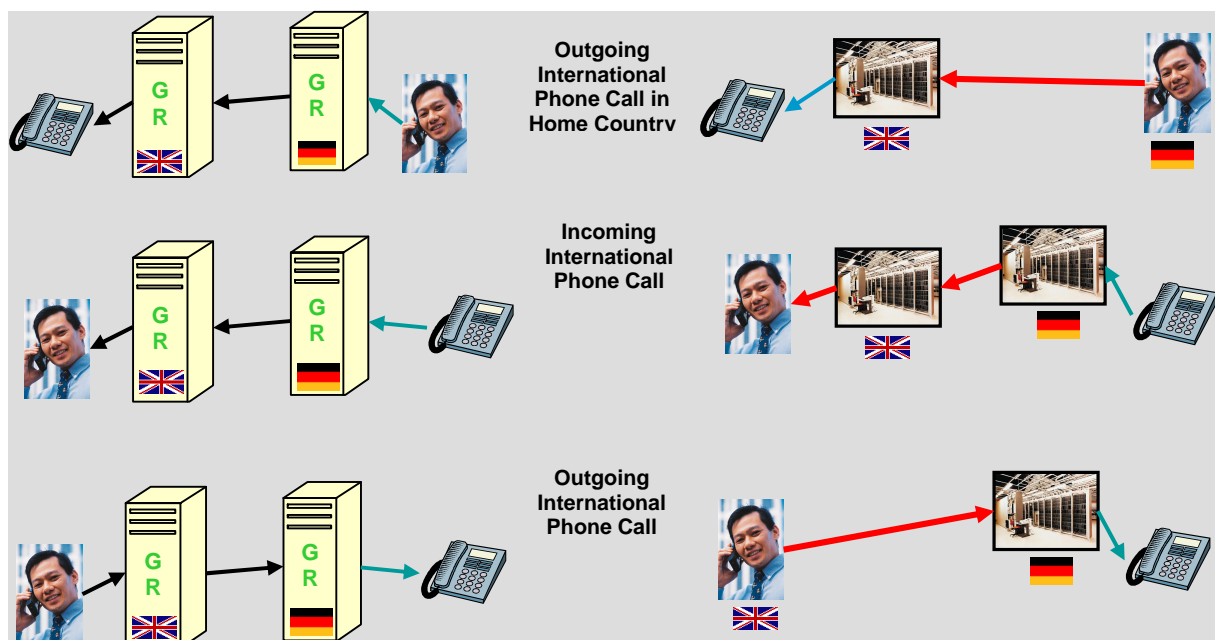


Figure 8: Application Scenario (1)

In the first scenario, the user is in his home country and phones abroad. Depending on the country, this can cause costs of up to 2 US-\$ per minute. Using **Globe Roam**, the customer will execute the call through our **Globe Roam** architecture. He dials up the **Globe Roam** server in his country and does the phone call via our network. The customer will then be charged the national phone tariff plus a fee for the international call that is much cheaper than his current charge.

The second scenario shows a user that is currently abroad, in our example, in the UK. He gets a phone call from Germany. In the current solution, this phone call is seamlessly forwarded to the UK. However, high roaming charges apply that have to be paid by the user. A **Globe Roam** customer has been provided with a UK SIM card and thus the phone call is transmitted through the **Globe Roam** network from Germany to the UK and then transformed in a national phone call to a mobile user. This is a much cheaper solution.

Now, in the third scenario, the user is abroad in the UK and wants to phone back to Germany. In the conventional case, he dials the German phone number and has to pay for the international phone call. His costs are not only the already high costs for a mobile initiated international phone call, but he furthermore typically has to pay a 25% surcharge which is retained by his home network operator. As a **Globe Roam** customer, however, he just routes his international phone call through our infrastructure and therefore, only the charges for a national mobile phone call plus a surcharge for the call routing through our network applies.



Figure 9: Application Scenario (2)

A scenario that really comes expensive both for the caller and the mobile phone user is the fourth scenario shown in Figure 9. The mobile phone user is abroad in the UK, and a business partner from the UK wants to phone him. In the current industry practise, the user has a German phone number, and so the business partner has to call the German number which causes high costs for him. But the call is forwarded to the UK again since our mobile phone user is staying in the UK at the moment, and now again, high roaming charges apply to our mobile phone user. The whole phone call runs through Germany although both

persons are in the UK. That does not only result in unnecessary high costs, but also in a long delay and sometimes in a significant loss of speech quality. As a **Globe Roam** customer, you have a phone number in all of our CoP, and so your British business partner anyway always calls your UK number. Our infrastructure now knows that you are in the UK, and so the call is directly forwarded to your current mobile number.

The fifth scenario looks similar in both cases. However, we must not forget that in addition to the national mobile phone charges in the UK, the German operator of the mobile phone user charges a 25% surplus which will not be the case for the **Globe Roam** customers. Furthermore, roaming users abroad are typically not allocated to a low cost tariff of the hosting network operator but to the most expensive one. This, too, increases the phone charges for roaming users abroad, even if they “only” perform a national phone call.

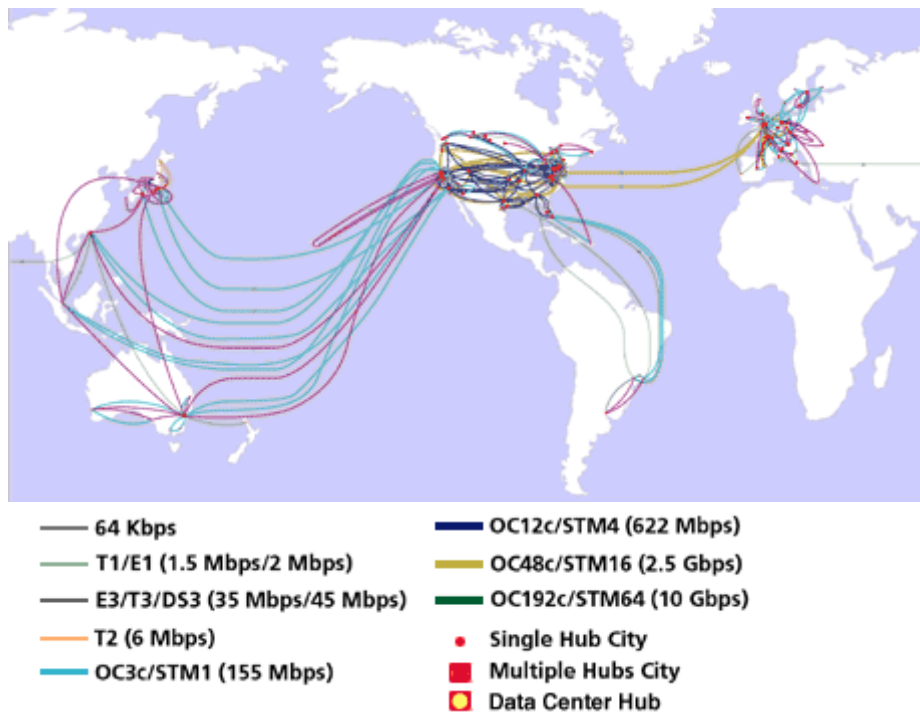


Figure 10: UUNET's Global IP Network

From the description beforehand it is clear that the crucial component in speech quality and availability of our service is the underlying network. While private users can choose among numerous Internet Service Providers (ISP) worldwide, a business like **Globe Roam** will have to choose one ISP that operates worldwide and can provide us with reliable IP connections that fulfil certain Quality of Service (QoS) levels. And there are indeed some major players in this field, like [UUNET](#), [Cable & Wireless](#) or [AT&T](#) which offer customer specific QoS levels. Figure 10 below shows UUNET's network in the whole world. As we can see, all of **Globe Roam**'s CoP have UUNET Points or Presence (PoP) that are suitable for linking our own servers to the internet with specified QoS.

Globally operating ISP also have another advantage. They are engaged in the business of *Server Hosting*, and this is what **Globe Roam** chooses as a solution to avoid the necessity to rent office space for its servers in its CoP. Rather than building up own computer centres, we will install our servers on rented space in the ISP's computer centre. After the initial setup of the servers, they can be administrated remotely, unless there is a hardware failure. Remote administration will be done by our IT staff in the **Globe Roam** headquarter.

13 Appendices or Exhibits

13.1 Financial Projections

13.1.1 Initial Funding

Position	Cost per unit	No. of units	Total Investment
Server	15000	2	30000
Central Server	20000	1	20000
Set-up of Servers	1000	100	100000
Homepage	100000	1	100000
Software Implementation	50000	1	50000
Furniture and Fixture			15000
Company Registration			10000
Initial Investment			325000

Table 4: Initial Fund Requirement

13.1.2 Balance Sheet (Overview)

PROJECTED BALANCE SHEET (31st Dec, 2002)

I. Source of Fund	
Share Capital	1913
Long term loans	400
TOTAL	2313
II. Application of fund	
Fixed asset	
Server and computer	50
Furniture and fixture	15
Software	50
Home page	100
Start-up cost	
Set-up through ISP	100
Company registration and miscellaneous	10
Current asset	
Cash	1988
TOTAL	2313

* All figures are given in multiples of S\$1000.

Table 5: Balance Sheet

13.1.3 Profit and Loss Calculation for 2003-2007

Projected profit and loss account					
Year	2003	2004	2005	2006	2007
Sales revenue	7505	34490	43741	55475	70355
variable operating cost	5307	26696	30932	39230	49753
Monthly charge on SIM card	541	2485	3152	3997	5069
Lease rental cost	180	180	180	180	180
System operating cost	131	131	131	131	131
Salaries and wages	702	752	807	866	929
Depreciation	43	43	43	43	43
Amortisation of preliminary expenses	22	22	22	22	22
Operating profit	579	4180	8475	11006	14228
Sales and marketing	375	384	343	353	363
Administrative	59	60	60	61	61
PBIT (profit before Interest and Tax)	145	3737	8072	10593	13804
Interest	40	40	30	20	30
PBT (profit before Tax)	105	3697	8042	10573	13774
TAX (@24%)	25	887	1930	2538	3306
PAT (Profit after Tax)	80	2810	6112	8036	10468
ROE (return on equity)	4%	147%	320%	420%	547%

* All figures are given in multiples of S\$1000.

Table 6: Profit and Loss Estimation

13.1.4 Detailed Cash Flow Analysis

Cash Flow analysis						
Year	2002	2003	2004	2005	2006	2007
Investment	1913					
Cash outflow	1913	0	0	0	0	0
Profit after tax		80	2810	6112	8036	10468
Add depreciation		43	43	43	43	43
Add						
ammortisation		22	22	22	22	22
Loan repayment			-100	-100	-100	-100
Cash in flow	0	145	2775	6077	8001	10433
Net Cash in-flow	-1913	145	2775	6077	8001	10433
IRR	114%					
Pay back period	< 2 years					

Table 7: Cash Flow Analysis

13.2 GSM Subscribers

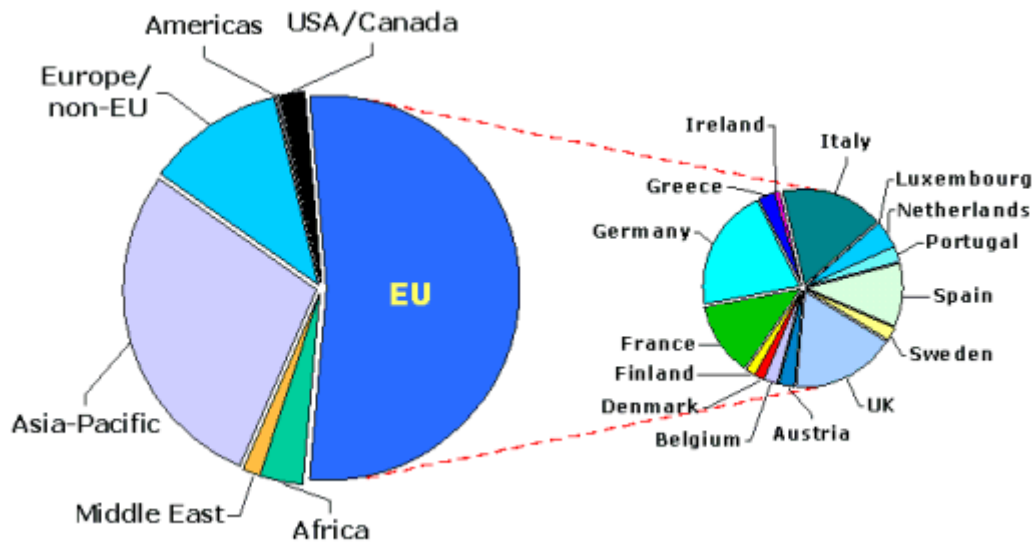


Figure 11: GSM Subscribers (June 2001), including European Breakdown

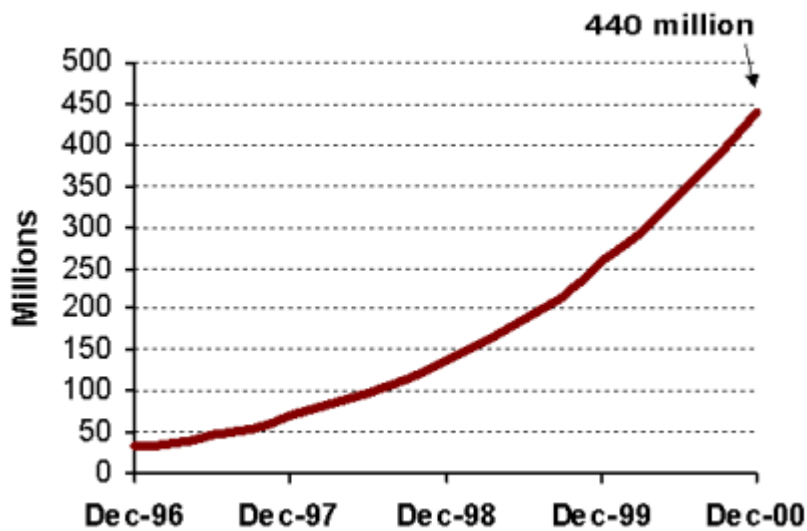


Figure 12: GSM Subscribers worldwide

Source: [GSM World](http://www.gsmworld.com)

13.3 Facts about Roaming

Abstract

“Roaming tariffs vary greatly. In New York, the networks Nextel, Bellsouth, Voicestream, Pacific Bell and PCS1 are available. In Paris, the networks are SFR, Orange and Bouygues Telecom. All operators stress that prices are only guides.

In some cases your service provider (when you don't deal directly with the mobile phone network) will add its charge to the network's price, and this charge will most likely be higher than the one listed below. All the prices listed are per minute without any discounted tariff deals.

New York to UK:

Vodafone

Cheapest to UK: Nextel 77p

Cheapest incoming: Nextel 62p

Most expensive outgoing: Bellsouth £1.27p

Most expensive incoming: Voicestream £1.32

(Exclusive of VAT)

T-Mobile

Cheapest outgoing to UK: Nextel 77p

Cheapest incoming: Nextel £1.27p

Most expensive outgoing: Bellsouth 94p

Most expensive incoming: Voicestream £1.53

(Inclusive of VAT)

O2

Outgoing to UK: £1.36p

Incoming: £1.02p

(All exclusive of VAT)

Orange

Outgoing to UK: £1.10p

Incoming: 55p

Orange points out that UK VAT is not applicable on calls made or received outside of the European Union

Paris to UK:

Vodafone

Cheapest outgoing to UK: Bouygues Telecom 72p

Cheapest incoming: All networks 66p

Most expensive outgoing: SFR and Orange 73p

Most expensive incoming: All networks 66p

(Exclusive of VAT)

T-Mobile

Cheapest outgoing to UK: Bouygues Telecom and SFR 48p (off-peak)

Cheapest incoming: All networks 76p (off-peak)

Most expensive outgoing: SFR and Orange 81p (peak)

Most expensive incoming: All networks 82p (peak)

(Inclusive of VAT)

Orange

Outgoing to UK: 60p

Incoming: 30p

(VAT inclusive)

O2

Outgoing to UK: 72p

Incoming: 80p

(All exclusive of VAT) “

BBC News, EU raids may bring cheaper roaming, July 2001

Interview with customers (abstract):

“My regular bills are 50-100 UK £. Then, I go to America or Germany for a couple of weeks and my bill is around 300 UK £. And I haven't made many calls at all!”

[Ofcom](#), the Office of Telecommunications, is the regulator for the UK telecommunications industry and has made several studies about the high roaming costs of British users that use their GSM phones abroad. In their studies, they highlight the following observations:

“The study shows that UK prices for pre-pay international roaming - the service that allows you to use a foreign mobile network when travelling abroad - are much higher than for customers in France, Germany, Sweden and Italy.

As well as paying higher prices for outgoing calls, UK consumers can pay up to £1.50 per minute to receive incoming calls whilst travelling in Europe.

Oftel research shows that many consumers may be getting caught out because they are not aware of the high prices. Less than a quarter of consumers, when they bought their phone, had any knowledge of the price of using a mobile phone abroad."

Oftel Study, 7th November, 2001

13.4 CV Management Team: Susann Naomi Israel (CEO)

Susann Naomi Israel

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Singapore 22 94 01

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Mobile +65 9781 7624
Email SNIsrael@web.de



Career Interests

Management Consulting (Financial Services)
Project Management / Strategy / Business Development
Mergers and Acquisitions

Skills and Achievements

- Proven track record in international project management
- Strong verbal and written communication and presentation skills
- International outlook and cultural expertise: 12 months USA, 3 months Austria, 2 years Asia Pac
- German (native), English (fluent), Japanese (spoken), French (basic)

Work Experience

Regional Project Manager, Corporate and Investment Banking, Deutsche Bank AG APHO, Asia Pacific, (04/2002 – 07/2002)

- Consulted DB entities in Japan, Singapore, HK and Australia in matters of U.S. tax regulations and coordinated related projects enhancing processes and guidelines.
- Escalated and reported to regional and global management, i.e. results, time lines, budgets.
- Coordinated with external auditors.
- Completed project successfully ahead of time and on budget.

Senior Consultant, DB Consulting Group, Deutsche Bank AG head office, Frankfurt and Singapore, (09/1998 – 12/2001)

- Consulted internationally on a variety of management consulting projects in Frankfurt, Vienna, Singapore and Seoul.
- Restructured clients' business (front and back office), developed new sales strategies, implemented risk management strategies, and helped saving substantial costs by reengineering business processes.
- Project experience high lights:
 - Sales strategy and market expansion for bank alliance, Canada / Germany, 3 months
 - Business restructuring and process redesign for retail bank, South Korea, 7 months
 - Outsourcing and migration management for transaction bank, Germany, 12 months

Education

07/2002 – ongoing MBA (International Business)
Nanyang Business School / St. Gallen University.
1998 – 2001 Seminars, i.e. Consulting and Coaching, Project Management, Business
Process Reengineering, Intercultural Training, M&A.
Deutsche Bank AG and external.
1995 – 1998 Production Engineering.
Technical University, Fachhochschule Hamburg.
1993 – 1995 Mechanical Engineering.
Technical University Hamburg-Harburg.

Additional Information

- I am an advanced diver and speed skater. In addition, I enjoy yoga, music and reading. I have travelled extensively and I dream of completing my pilot's license.

13.5 CV Management Team: Subhabrata Guru (CFO)

Subhabrata Guru

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Singapore, 638356

Phone: +65- 68984047

E-Mail: subhabrataguru@hotmail.com



Career Interests

Corporate Planning
Consulting (Strategic Management, ERP, Supply Chain Management)
Process Industry

Skills and Achievements

- Increased the profit margin of the previous company by 10 million USD per annum
- Was promoted to middle management at the age of 31 (youngest in the organisation)
- Analysed the customer requirement and introduced a new product line
- Implemented ERP (SAP R/3)
- Conducted mass impact programme and Implemented change management
- Took part in building a start-up organisation

Education

2002 till date	MBA (Strategic Management) Nanyang Business School, Nanyang Technological University, Singapore
1998 - 2000	CFA Institute of chartered financial analyst, Hyderabad, India
1987 - 1991	B.Tech (Chemical Engineer) Indian Institute of Technology (I.I.T), Madras, India

Work Experience

Manager- Planning and optimisation, Haldia Petrochemicals Limited, India (2001-2002)

- Monitored and optimised enterprise supply chain
- Led a cross-functional team and built various decision making model
- Prepared the annual business plan (ABP)
- Developed the structured MIS to monitor ABP.

Senior Engineer – Projects, Haldia Petrochemicals Limited (1997 – 2001)

- Conceptualised and developed various systems (material storage & movement, vehicle movement, utilities, control system etc.) in a green field petrochemical project (project cost 1.2bn USD)
- Co-ordinated the entire project management activities for building the naphtha cracker plant
- Carried out the start-up planning.
- Led a team of engineer and operator and commissioned naphtha cracker unit.

Process Engineer – NOCIL (1991 – 1997)

- Managed a team of operator in shift
- Provided technical supports to customer
- Carried-out production planning
- Optimised the ethylene yield and increased the profitability

Additional Information

- Received the NTU-MBA scholarship
- Published a paper in Chemical Engineering Journal
- Interests/Hobbies: Bridge, swimming, soccer, cricket

13.6 CV Management Team: Gabriel Rüeck (CIO)

Gabriel Rüeck

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Burlington Square
Singapore 189651

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email: gabriel@rueeck.de
Internet: <http://www.rueeck.info/>



Career Interests

- IT Business (IT Security, IT Strategy, E-Commerce, IT Project Rollout)
- Telecommunications (Network Operators, Manufacturers)
- International Activity
- Combination of IT and Business Strategy

Skills and Achievements

- MBA Scholarship from Nanyang Technological University
- Computer Skills: Win 98/XP, Linux, Solaris, TCP/IP, HTML, ANSI-C, Assembly for DSPs
- International Deployment for Siemens Telecommunications in China (Beijing, Shanghai)
- Trainings in ISDN, Intelligent Networks, Video Codification, IT Security
- Languages: German, English, Portuguese, Spanish, some French

Education

since July 2002 MBA (E-Commerce)
 [Nanyang Business School](#), Singapore

July 1987-June 1995 Electrical & Electronics Engineering (Focus: Telecommunications)
 [Universität Kaiserslautern](#) (Germany) and
 [Universidade de Coimbra](#) (Portugal)

Work Experience

Senior Engineer DSP & Algorithms, Siemens Ltd., Beijing, (April 2001 – January 2002)

- Team Leader of DSP-related software implementation (6 staff engineers)
- Coordination of work and definition of work packages
- Enabling of staff engineers

Service Engineer, Siemens AG, Munich (April 2000 – March 2001)

- Commissioning of WAP/MIA gateways for GSM network operators in China and Italy

GSM & UMTS Development Engineer, Siemens AG, Munich (July 1995 – March 2000)

- Implementation of speech processing algorithms in DSPs such as speech codecs, echo cancellers or noise suppressors
- Test and verification of the algorithms in-house and in real networks
- Partial project leader of AMR speech codec implementation

Additional Information

- Hobbies: Travelling, Photographing, Computer/Internet, Sightseeing
- Participation in European Exchange Program "Erasmus" in Portugal (1 year)

13.7 Abbreviations

ARPU	Average Revenue per User
CoP	Countries of Presence. Those are the countries where Globe Roam is present with a server node.
GSM	Global System for Mobility, denominates a system for digital mobile telephony.
IP	Internet Protocol
ISP	Internet Service Provider. Companies like Singnet , Pacific Internet or T-Online which allow customers connections to the internet.
OfTel	Office for Telecommunications, a regulatory board for the telecommunications industry in the UK
PDF	Portable Document Format, a format introduced by Adobe® which displays documents on different computer platforms in the same way. It can be read with the free Adobe® Acrobat® Reader .
PoP	Point of Presence. This term denominates a location (city) where an internet provider has servers available for dial-up or permanent IP connections.
QoS	Quality of Service. This term is used in IP data transfer when some IP packets are preferred over others. The preferred packets are said to have a higher QoS level rather than the remaining packets because they are routed faster than other IP packets. Typically, VoIP traffic is routed with preference, while email has a very low preference.
SIM	Subscriber Identification Module. This is a small chip card which contains the information of the subscriber of a GSM network.
VoIP	Voice over IP. A method to transmit voice in IP packets through the internet rather than in circuit-switched connections.