Stockholm School of Economics Marketing Department

Skype -Reasons for Growth

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ABSTRACT

In terms of user registration, Skype is one of the fastest growing companies ever. In less than 2 years and with limited marketing resources, Skype went from zero to 50 million registered users. Today Skype is the global symbol for telephony over Internet. Prior to Skype's launch in 2003, Net2Phone was the clear market leader of VOIP, and the company that industry analyst thought would dominate the market. Net2Phone has now a marginal market share.

This thesis looks closer at Skype's explosive growth in relation to Net2Phone's decline, in order to find the empirical and theoretical reasons behind Skype's success.

I was employed by Skype from January 2004 to August 2006, and had the opportunity to closely follow the development of the company and the industry. The thesis uses my first-hand experiences as the empirical background, as well as interviews with Skype employees, industry experts, and printed material.

According to this thesis, Skype managed to grow its user base so quickly primarily because the quality of the product. More specifically, the company managed to develop a standardized product that was valuable to people across borders, age groups, and other demographic differences; and because the product quality and Skype's closed network made the product viral. Finally, Skype had an exciting story to sell to journalists and partners from all over the world, which created initial brand awareness.

Even though it's possible to discuss Skype's marketing strategy and growth by using existing marketing theories, they are usually not quite suited to explain Skype's extreme growth, and cannot really explain how marketing should be structured in similar companies. To finish the thesis, I therefore discuss what a software company should focus in terms of product development on to achieve rapid growth.

1. INTRODUCTION

1.1 Background

With 300 million downloads in less than 3 years, Skype is one of the most downloaded software in Internet's history, and the fastest growing phone company ever (in terms of new users).

I joined Skype in January 2004, when there were about 20 people working in the company. I left the company 2 $\frac{1}{2}$ years later in August 2006, when close to 400 people were employed, and the company had been sold to eBay for up to USD 4.1 billion (27.3 billion SEK)¹. During these years, I had the opportunity to closely follow the development of the company, the market, and the product.

Table 1: Snapshot from January 2006

- > 150,000 new users signed up to the service each day
- > About 6M users simultaneously logged in to Skype
- > Over 30M persons logged in to their Skype account every month
- Skype had users from every country officially acknowledged by the United Nations

As usual in startups, my job description changed from online marketing, to business development, and finally product management. I was based out of Skype's London office, but I traveled to Estonia on regular basis. I spent a few months working for Skype in San Francisco.

Contrary to what many people think, Skype was far from the first VOIP software on the market – the technology had been around for a decade². When Skype launched, both MSN Messenger and Yahoo Instant Messenger had VOIP built into their chat

¹ The final price depends on the outcome of a earn-out clause in the purchase agreement. Exchange-rate as of April 19 2007 (www.xe.com)

² Sten Nordell tried an early version of VOIP-technology already in 1992

application, and companies such and Net2Phone had been offering VOIP solutions to consumers for over 5 years. Yet it's Skype who has managed to define the technology, a technology that many believe will completely replace the current telecommunication industry.

1.2 Objective

General: In this paper I investigate the reasons to why Skype has had such an explosive growth of active users, starting from Skype's launch in August 2003 to the sale to eBay in September 2005, especially in contrast to Net2Phone's much more modest development. More specifically, I look closer at:

- 1) What did Skype do Differently? I look deeper into how the company managed to attract such a large number of users with very limited marketing resources. When the company started out, it didn't have a single marketing partnership and no real budget for marketing, but still managed to surpass previous growth records. What made Skype different from Net2Phone? I try to use existing marketing literature to highlight and explain the differences.
- 2) Implications for Product Launches: Based on existing marketing literature and my empirical findings, I try to draw some more general conclusions about what consumer software and web application-startups should focus on when developing and launching a new product, in order to build a large user base quickly. What lessons can Skype provide to other who wants to repeat Skype's success?

1.3 Delimitations

1.3.1 Users - Not Profit

It could be argued that a fast growing user base is uninteresting unless it is transformed into a sustainable and profitable business. In a long-term perspective, that is of course true. However, I believe the investors and founders of Skype disagree, and so do the founders many other startups – recently acquired YouTube and MySpace, to mention just a few. A large and active user base is a key part of the valuation of a company, which makes user acquisition the key success factor for new Internet startups (in addition to user retention).

If you manage to attract a large member base, monetization is (assumed to be) straightforward. For example, MySpace and YouTube were both making losses when they got bought from News Corp and Google for 580M USD and 1.65B USD respectively. Sites can use their huge traffic numbers to generate revenues through online advertising and premium services. As a representative from Google said when they bough YouTube: "...an old joke in the Internet is that URL stands for Ubiquity first, Revenue Later."³

Peter F Drucker, the US management guru, has said "The purpose of a business is to create a customer". Evidentially, Skype knew how to do that.

It should be remember that each registered user is not necessarily the same as a unique person, since each person can have several accounts on Skype. That means that 50M registered users probably do not translate to 50M active Skype user. On the other hand, several persons can use the same account, which is the case for many families.

A final reason for focusing on members instead of profit is that this is what the founders actually wanted to achieve – profit is not always the only reason for starting a company. It is claimed that for Janus Friis, it was more important to develop a service that is used by a lot of people than actually being profitable.⁴

1.3.2 Why Net2Phone

Any company offering voice communication could be seen as a competitor to Skype, since they all fulfill the same basic need. Mobile phone operators such as Comviq, fixed phone companies such as Telia, and other software such as MSN Messenger and Yahoo

³ http://news.softpedia.com/news/YouTube-To-Boost-Profit-Soon-Google-Thinks-48853.shtml

Instant Messenger all help people communicate via voice. However, MSN and Yahoo have been positioned around their chat functionality, which makes it less relevant to compare Skype with them.

Table 2: Why Net2Phone

- Net2Phone has been around since the late 90s
- Clear focus on telephony over Internet since the start
- > In 2001, they had a product with very similar features to Skype the CommCenter
- At one point Net2Phone had a strong market dominance, claiming to have over 70% of all PC-to-phone traffic globally
- They had several distribution partnerships with major global brands, and were the darling of the industry analysts
- Today the company has around 100,000 users in the US, and not much more internationally

1.4 Structure of Thesis

This introduction is followed by a description of the research method I've used, in the methodology.

In the empirical findings section, I outline the most important events in Skype's and Net2Phone's history. It begins with Niklas Zennström pitching IP-telephony to the management team at Tele2 in 1998, and ends with Skype announcing the merger with eBay on Sept 12, 2005. I've provided a brief overview over the history and key events of Net2Phone as well, from the launch of its first product in 1996, to IDT buying Net2Phone and taking it off NASDAQ in February 2006.

After comparing Skype and Net2Phone side-by-side I've highlighted factors that I believe have been crucial for Skype's growth, in Reasons for Growth. In this section I also explain these factors in more detail with the help of different marketing theories that

⁴Politiken, 14 Feb 2005: "Portraet: Janus Friis skabte KaZaa og Skype –fratelefonpasser till IT-milliardaer?"

I find relevant. Finally, I describe some of the ways the current marketing literature have difficulties explaining Skype's growth, and what I believe should be added in order to provide guidance to companies trying to repeat Skype's success.

3. METHODOLOGY

- Exploratory I'm trying to identify reasons for growth by reasoning I'm not testing a hypothesis
- > Qualitative Interviews and observations, rather than surveys
- Reliability and Validity Although untested, the conclusions in this thesis should be reliable, and the thesis should cover the questions I've set out to answer

3.1 Exploratory vs. Conclusive

There are two main categories of research design for marketers: Exploratory and conclusive. An exploratory process should be used when the task is to "gain additional insights". An exploratory research design is usually based on a small qualitative sample, and it is not very strictly defined. A conclusive approach should be applied when the researcher wants to test an existing set of theories, and wants to either support or dismiss a hypothesis. If the conclusive approach is applied, the researcher is usually collecting empirical data based on a specific theory and or hypothesis he or she wants to test (Malhotra 1993). In this thesis, I am following an exploratory approach.

3.2 Qualitative vs. Quantitative

The standard procedure when following an exploratory approach is the qualitative method, which allows a more flexible research process. Again, the qualitative method aims at increasing the understanding of phenomena, rather than the testing of a hypothesis.

The empirical data is collected from my own experience gained during my 2 ¹/₂ years as an employee with the company, and from interviews with Skype employees and other industry experts. In addition, I've used public information about both Skype and Net2Phone, most of it sourced online. My research method is therefore qualitative, which normally is a good way to get an overview and understanding of a subject or situation, although it is difficult to generalize the findings. (Holme & Solvang 1997),

3.3 Reliability and Validity

In order for a study to have a high scientific value, the tools used in the research have to be *reliable*. Equally important is that the study actually measures what it is supposed to measure, which makes the work *valid*. High reliability means that several independent but similar studies should produce the same result. The validity of a research study is determined by the relation between the purpose of the study and the research design. High validity means that the results are correct and that the results can be tested empirically (Malhotra, 1999).

Since this thesis is similar to a "war story", it is natural that the reliability of the thesis is questionable. I have used my own personal experiences and established marketing theories, public knowledge (such as news articles, press releases), and interviews to gain an objective picture as possible of what actually happened with Skype and Net2Phone during these years. Some of the people I've spoken to:

- Andy Abramson, author of one of the most the influencial VOIP blogs: Voip Watch.
- **Bill Campbell**, founder of SkypeJournal, and a well-known VOIP blogger.
- > Taavet Hindrikus, one of the first software developers employed by Skype / Joltid.
- Kjell Nilsson, one of the founders / early employees of Tele2, and also Niklas Zennström's supervisor at Tele2.

I believe that these sources Skype has helped create a study that is indeed explaining the growth of Skype' user base, meaning that the validity of the work should be high. Since I no longer work for Skype (I left in August 2006), and since I have been aware of the risk of bias, I hopefully have been able to distance myself enough to get the right overview and extract important events and trends.

4. KEY EVENTS

4.1 Skype

2001 - The Origin

The story of Skype really begins in 1998, when Niklas Zennström presented an idea of Internet Telephony to the management team of Tele2, where he was working at the time. This is how Kjell Nilsson, who was Zennströms manager at Tele2, describes it:

"Jan Stenbeck (owner MTG/Tele2) had lots of ideas around VOIP, and we launched many projects around Internet and VOIP. But at that time broadband was limited, so there was not much interest from consumers, and we had enough to do to launch fix telephony services based on S7 and get the infrastructure in place. I guess that Niklas just gave up and started his own business together with Janus Friis, who also worked in the Danish operation 1996-1998."

But Niklas and Janus did not start Skype right away. Instead the founded Kazaa in 2001, and spent the following years perfecting their peer-to-peer technology for file sharing. Hence, Skype's founders and key software developers had already been working together for a few years before they founded Skype.

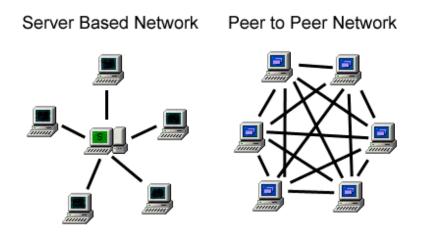
P2P-Network - say what?

A file-sharing network allows its members to easily swap files and data with each other. As you might remember, Napster was one of the first major network to reach a mainstream audience. However, Napster had a central database, which all files had to pass through. When the music industry won the right to close down the network, it was easily done through just shutting down Napster's servers. KaZaa, on the other hand did not have a central server, but instead relied on a peer-to-peer architecture. This made it difficult for the music industry to stop the use of KaZaa, and it spread quickly around the world (NY Times, 2003). This is how Wikipedia explains P2P:

"A peer-to-peer system is a distributed system whose component nodes participate in similar roles, and are therefore peers to each other... In contrast, a client-server architecture implies a sharp distinction between the clients which request and consume services, and servers which provide services."

Graphically, this is how the difference between a standard network and a p2p network can be represented:⁵

Figure 1: Served based vs. Peer-to-Peer



What it means is simply that in a p2p-network, there is no central hub that all data or traffic need to go through – instead the nodes communicate directly with each other.

In November 2001, a Dutch court ordered Kazaa to change the software to prevent their users to share copyright protected material over the network. Shortly afterwards, KaZaa was sold to the Australian company Sharman Networks. The founders and software team left the company, but continued to work together.

So even though KaZaa wasn't a great success for the founders in terms of profit, it helped them develop valuable proprietary technology, as well as it help them create a

⁵ http://wiki.shareaza.com/static/P2PNetwork

name for themselves among investors and consumers. With Kazaa, they upset a complete industry, with yearly revenues of US 21 billion (according to IPFI). Early versions of Skype.com actually highlighted this fact, stating "Skype is the next phenomenon from the people who brought you KaZaA."⁶

2002 - Getting in Gear

Bonus Fact 1: Skype was originally meant to be called Skyper, as in "Sky peer-to-peer". But Skyper.com was already taken, so the R was dropped.⁷

Contrary to what most people expect, fundraising for Skype was not an easy task, at least not initially. The industry was still slow after the dot-com bust, and Niklas Zennstrom and Janus Friis names were too close to the legal question marks around KaZaa. (See for example Dagens Industi, Sept 12, 2005)

Skype finally managed to get funding from Draper Richards in July 2002. The valuation of the company was relatively low, according to some sources. For 250,000 USD, Draper is supposed to have received a 5% stake in the company. (San Jose Mercury News, Sept 2005).

2003 - Free Internet Telephony that Just Works

In early 2003, 8 Estonian developers started developing the software that was to become Skype. The first version of Skype for Windows public BETA was launched on Friday the 29th of August, 2003. Skype offered basic 1-1 calling (no conference calling) and nothing else, but it was easy to use and easy to get started, and the sound quality was excellent. For example, this is CNET's user and editors rating of Skype on download.com:

Figure 2: Skype vs. Net2Phone

⁶ See http://web.archive.org/web/20031005035455/http://www.skype.com/

⁷ http://share.skype.com/sites/en/2005/11/origin_of_the_nameword_skype.html

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This is how Mike Powell, chairman of FCC (Federal Communications Commission) in the US, reacted when he downloaded Skype for the first time:

"I knew it was over when I downloaded Skype. When the inventors of Kazaa are distributing for free a little program that you can use to talk to anybody else, and the quality is fantastic, and it's free - it's over. The world will change now inevitably."

The first version of Skype's website was just as simple as the software. No technical or complicated words - focus on getting people to understand the benefits, and download and try out the product. The original tagline was simple: "Free Internet Telephony that Just Works".

According to Taavet Hindrikus, the focus for the development team was all about "delighting the user", and to making sure usability and call quality kept improving.

PR

Skype didn't organize a major party or PR activity around the launch. The team simply sent the download link to friends and bloggers. Even so, they managed to get their voice heard. One early example of the hype and interest that was immediate generated around Skype is from New York Times, one of the biggest and most well known newspapers in the world. The NY Time ran a one-pager about Skype in October 12, just over a month after the first Beta launch. Half of the article was about KaZaa, and the impact KaZaa had on the music industry.

NY Times currently has 11M unique visitors to its site each month, and over 1M circulation copies each day (Wikipedia). Kat James was head of PR of Skype, and this is how she describes the initial PR strategy:

"In the early stages, it was important to get the business community interested in Skype and to understand the implications of this new technology for consumers. So initially we targeted business, investor and technology media, then moved to target more consumer read publications such as the consumer read PC publications. We quickly followed to focus more on mainstream consumer press, particularly the lifestyle and trendsetting media."

Less than 2 months after the public launch, Skype reached 100,000 concurrent users online (the number of people who are simultaneously online and logged into to Skype).

Bonus Fact 2

In the middle of December 2003, another event occurred that is of vital importance for this thesis. I saw a job posting tucked away in the basement of Stockholm School of Economics, saying something along the lines of "Skype and Joltid is looking for a Market Analysts to join their small but growing company". Less than 10 people responded on the ad.

2004 – Charming the World

In early January 2004, Skype opened up the London office. Business development, marketing, and administration functions were based in London, while all development work remained in Tallinn.

Bonus Fact 3

In January 2004, there were only 5-6 people working in the London office. The office was a small 20 m2 room in a business hotel on Shaftsbury Avenue in central London, just off Piccadilly Circus. There were no computers available in the office, which meant that

some of the first recruits had to work their first days out of an Internet café next doors. Still, 30,000 new customers signed up to Skype every day.

In the movie Forrest Gump, there is a scene where Forrest Gump shows the front page of Fortune Magazine to an old lady who listens to his life story. The front page shows Forrest Gump and his partner Lt Dan on their fishing boat, smiling into the camera. On February 9 2004, Niklas Zennstrom and Jaanus Friis were on the front page of Fortune Magazine, looking straight into the camera, with a headline saying "Catch us if you can".

For Skype and Skype's PR people this was a major achievement – not only did it generate great publicity, but it also proved to people that Skype was a threat to take seriously. Kat James recalls that when BBC aired a program about VOIP and Skype during the same period, the number of new registration per day in the UK increased with 300 % temporarily.

A few months later (June 1), The Economists featured a one-pager about Skype and Niklas Zennstrom. The article explains that bold statements of disruptive technology and visions of changing business practices are not unusual for technology entrepreneurs. But as the Economics points out, Zennstrom has the facts to back it up: he's already done it with Kazaa.

Skype Growing Up

On February 21, Skype released a new version of its Windows client, which allowed conference calling for up to 5 people. This feature was heavily requested by Skype users in the Skype forums, and is especially important for people using Skype for business purposes, who could now do international conference calling for free. The business market was important for Skype from the beginning, and internal surveys showed that as much as 30% of the user base used Skype for work purposes.

On July 27, less than a year after the BETA release of Skype for Windows, Skype released the first non-beta version of its software: Skype for Windows 1.0.

Skype 1.0 included SkypeOut, which allows users to call ordinary phones (landlines, mobile phones). SkypeOut is "not free, but it's pretty cheap", to use Skype's own words. According to Skype's own vision SkypeOut would be obsolete within a not too distant future. If everyone can use Skype on different devices, and in different situations, there is no point for to dial outside the Skype network, and pay for it. This puts Skype in a tricky position when it comes to positioning: How do you promote a service which is using the same technology you try to kill, and is the only revenue source you have? Skype's answer was to offer it as an add-on service to its users, but clearly position it as an additional service, and only after the main message has been accepted by the users: Free phone calls to all your friends, as long as they are on Skype.

SkypeOut also gave the first concrete example of how Skype's business model is structured, a business model some people had problems understanding. It doesn't follow the traditional telecom model, with carriers charging their users to use their network. Instead, Skype's business model is closer to other consumer software companies, as discussed in 1.3.1.



Bonus Picture! Skype Celebrating the Launch of Skype 1.0

Soho, London, July 27, 2005

Left to right: Bill Hodgson, Product Development Skype for Business, (an almost hidden) Malthe Sigurdsson, Creative Director, Nils Hammar, Project Manager, Kate Opekar, Marketing Manager, Erik Andersson, Business Development, Mark Asseily, Business Development, Noly Konoso, PA to Niklas Zennström, David Johnsson, Business Development

On October 27, CNET published an article that gives a good overview of Skype's position in late 2004:

"When Sun Chun first heard of Skype and its promise of free, high-quality Internet phone service, he figured the claims were mostly hype. Chun, who generally considers himself an early adopter, had tried broadband phone services before, only to suffer lost calls and garbled conversations. So he was skeptical when reports began circulating a year ago of revolutionary peer-to-peer software that could render traditional phone companies obsolete, much as file-swapping services threatened the recording industry... The conversations with our friends are surprisingly clear and crisp," Chun, a San Jose, Calif., tech worker, said in an e-mail. "Calls to my friend in Australia were also of equal crisp quality. So now, I am urging all my friends and family to install this incredible software."

At this point, 60,000 users signed up to Skype each day.

Local Marketing Partnerships

In addition to PR, Skype used another tactic to seed markets – co-branded partnerships. A co-brand means that a company adds their own brand on the Skype application, and offers it to their users as their 'own' product. In Skype's case, the area that a co-brand partner has available for branding is quite limited. Initially, the graphics were only changed during the installation process, in the 'About' screen, and on the top bar of the application.

By following a co-branding strategy and partnering up with local partners in foreign and non-Western markets, Skype got access to millions of users who would otherwise be out of reach for a small startup, with limited marketing and localization resources. According to Faisal Galaria, this was especially important in specific markets, such as Japan, China, Poland, Spain, and Turkey. In these markets, partnerships manage to dramatically increase the uptake of new users.

In July 2004. PCHome Online became the first marketing partner to join forces with Skype. PChome Online is one of the biggest Internet portal in Taiwan, with around 9M users in total. Right from the start of the relationship, PChome pushed the client to their users through their different marketing channels. It worked - a little over one year after the first launch of the co-branded client it had been downloaded 7M times.⁸

A few months after the PChome Online deal was announced, Skype made a similar partnership arrangement with TOM Online, PChome Online's counterpart in mainland China, and one of the biggest Internet companies on the Chinese Internet market.

But Skype did not only partner with major online players. Getting the brand into retail stores was also one of the key objectives for Skype's business development team early on, as described by Kate Opekar:

"For the first two years, the deals we did with hardware partners were primarily to raise people's awareness of the brand by getting the 'Skype Certified' mark - and Skype related marketing materials - into retail stores. We also capitalized on a first mover advantage in retail - no one else (including Microsoft) had gone out and really focused on free calling as a message to stimulate sales of PC peripherals. We bundled SkypeOut minutes with products (SkypeOut etc) as well, which helped our partners raise sales by offering consumers a perceived extra value."

Here are some of the major marketing partnerships Skype managed to close the first years:

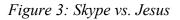
Table 3: Skype Marketing Partners

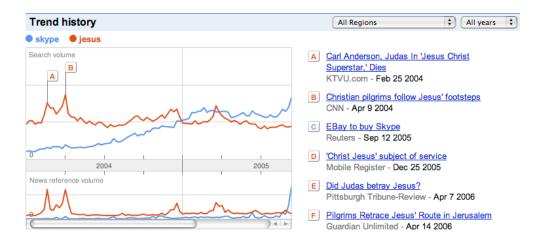
- Logitech (US / Global)
- ➢ Bebo (US / Global)
- ➢ Salesforce.com (US)

- Radioshack (US)
- El Corte Ingles (Spain)
- Phillips (Dutch / Global)
- Panasonic (US / Global)
- Aftonbladet (Sweden)

2005 - Marching On

In early 2005 - "Skype" surpassed "Jesus" in terms of number of searches on Google. Jesus has been around for 2,000 years, Skype just over a year, which shows the hype that has Skype managed to whip up in only a few years.





By March 11 2005, 1M users from around the world had signed up to the SkypeOut service, showing that people are actually willing to pay for add-on services to Skype.

Shortly thereafter, Skype launched additional paid-for services: SkypeIn and Voicemail. (SkypeIn allows a user to get a regular phone number connected to their Skype account. Since the call is routed over Internet, it's fixed to any specific location - you can answer

⁸ http://www.emsnow.com/newsarchives/archivedetails.cfm?ID=9943

your SkypeIn call wherever you are in the world). These services made Skype a real alternative to a fixed phone line for some people, specifically if the user also has a mobile phone.

Table 4: Broadband Explosion

- Internet statistics published OECD showed that the number of broadband subscribers per 100 inhabitants in 15 EU countries grew from 1.6 in 2001, to 14.2 in 2005.
- ➢ In total, the number of broadband subscribers in 2005 (OECD countries only) amounted to 157M.

Even though Skype recommends users to use broadband, the application works well even on dial-up connections. Brazil and Poland are two countries with low broadband penetration and relatively few broadband subscribers; still they have constantly been among the Skype's top ten user list (see for example Eurotechblog). These countries also have large ex-pat communities outside their countries, as well as high telecom rates.

The Big Sell

On Sept 12, after a few weeks of intense speculations in the media, eBay and Skype announced that eBay would purchase Skype for \$2.6 billion in up-front cash and eBay stock, plus \$1.5 billion in a performance-based earn-out. Skype had around 54 million registered user names in their database, and about 150,000 new users signing up per day.

From the point of Skype user growth, the acquisition has had a significant impact. In the first 2 years in business, 50M users had registered with Skype. 6 months after the acquisition, another 50M people had signed up. Increasing growth rate is expected from a viral product, but eBay provided Skype access to million of their users through their different Internet properties around the world.

4.2 Net2Phone 1996 - 2006

From Hotdogs to High Tech

Howard Jones founded US-based IDT in 1990. He's an entrepreneur who started out selling hot-dogs before moving on to high-tech (as described in his book 'On a Roll:

From Hotdog Buns to High Tech Billions'). The company launched their subsidiary Net2phone in 1996, and went public with the company in 1999.

In contrast to Skype, the initial offering was based around calling regular phones from the Internet (think SkypeOut), but 8 years before Skype. Net2Phone did offer calling between Net2Phone users, but this was seen as an additional feature, rather than a core benefit, and it wasn't for free. The core feature and benefit were still Pc-to-phone calling.

Early Success and Partnerships

Just as Skype, Net2Phone had major partners early on in their history. In 1998, they partnered with Excite, a leading Internet portal company at the time. Excite agreed to promote Net2Phone's PC-to-phone service on websites in UK, Germany, France, Australia, Netherlands, Japan and Sweden.

In 1999, Net2Phone and Netscape signed a distribution agreement, which gave Net2Phone exclusive rights to be featured inside the Netscape browser. This was of course an important distribution deal for Net2Phone, since Netscape had over 30% of the browser market share at the time (Siliconvalley.com).

In 2000, Yahoo invested 150M USD directly in Net2Phone. MSN also announced that Net2Phone would power MSN Messenger's PC-to-Phone service. This meant that Net2Phone had distribution deals with all the major messenger clients.

In March 2000, the Net2phone's stock price was just over 60 USD and the company was seen as a clear leader in an industry expected to boom. In October 31, 2000, Net2Phone had 1.8M active customers, according to their own press release.

Net2Phone then launched a CommCenter, an enhancement of their current PC-to-phone offering, in 2001. The CommCenter offered the same basic product features that Skype, but 2 years earlier:

Table 5: Net2Phone Commcenter

- PC-to-Phone calling with the first 5 minutes of domestic calls free (Skype launched this in early 2006)
- ➢ Free unlimited PC-to-PC calling
- Active Contact List, enabling users to see when friends, family and co-workers are logged on so they can be contacted with just one click
- Online account management, enabling people to track call detail records, billing and costs for individual calls

"I can't hear you?"

Unfortunately the quality of the product was not that great. This is what Bill Campbell, BETA-tester of Net2Phone, said about his experiences:

"Two of my fellow beta testers who were early users of Net2Phone (like me) claim the quality was not there. Even simple things like full duplex⁹ were missing in a large number of calls. And typical of Net2Phone was to hype things like fax, but not deliver. Faxes took over 5 hours to deliver in some of the testing we have done."

In April 2002, Yahoo sold its stake in Net2Phone . It was reported that Yahoo already had acquired the PC-to-phone technology it needed in a separate deal. This was a major blow to Net2Phone, since Yahoo was a key distribution partner to Net2Phone (News.com).

A Change of Strategy

From reading press releases and fiscal reports from this period, you can see a new strategy emerges for Net2Phone around this time. Their focus was on a B2B offering, rather than providing a service directly aiming at consumers. To this purpose, Net2Phone created two wholly owned subsidiaries in 2003: Net2Phone Global Services (NGS), and Net2Phone Cable Telephony (NCT). NGS is a provider of VoIP services to retail consumers and small- to medium-sized businesses around the world. NCT's works with cable operators to offer residential phone service to subscribers through the existing cable

networks. This happens just a few weeks before Skype comes out with the first BETA version of its application.

The reason for this switch in strategy can be found in an article in Business Week from June 2004:

"Investors are most excited about the side of Net2Phone's business that aims to become the outsourcer of choice for small and midsize cable companies that want to offer Internet phone calling to their customers. Net2Phone still derives the vast majority of revenues from its core business of selling VoIP services to 600,000 customers worldwide, mostly via prepaid phone cards, but investors value the company almost entirely on its cable business potential"

And this is how the company describes itself in the 'About' section in their press releases from these days:

"Net2Phone provides PacketCable, SIP and wireless solutions around the world. As a leader in turn-key hosted VoIP telephony services, Net2Phone has routed billions of VoIP minutes globally, servicing more than 100,000 users in the US as well as hundreds of thousands of more overseas. Net2Phone provides partners with a SIP-based broadband telephony solution, calling cards, prefix dialing and enterprise services in over 100 countries.

Note that nothing in that paragraph informs investors or potential user that Net2Phone offer a service directly to consumers.

Of course, partnering up with major companies can be a good way to reach new markets. But the partners that Net2Phone manages to sign up during these years are not big enough to really drive a large number of users. Some examples of their partners:

Table 6: Net2Phone Partnerships

- Liberty Cablevision of Puerto Rico
- Cable & Wireless (Cayman Islands)

⁹ Non-duplex means that you can't communicate over an open line at the same time – think Walkie-Talkie

- Empresa Telecomunicaciones de Bogota (Colombia's largest Telecommunications Operator)
- ▶ Bresnan Communications, (13th-largest U.S. cable provider)

Andy Abramson explains the difference in strategy between Skype and Net2Phone:

"Skype was all about viral growth. Net2Phone was pursuing mostly a channel strategy with others reselling their technology, and they largely wanted to sell to carriers, especially cable operators. Their attempts to go direct to consumer was often underfunded or not fully executed, and they were using H.323¹⁰ while others saw SIP looming. Part of this was the internal battle with IDT whom eventually brought them back in house".

The Small Sell

In February 2006, the company was taken off NASDAQ, and the shareholders were offered USD 2.05 per share. The market valuation had gone from USD 4.5B to USD 160M in 6 years time.

¹⁰ An alternative "VOIP protocol". A protocol is sets of rules governing communication within and between endpoints (Wikipedia).

4.3 Table 6: Time Line Skype – Net2Phone

	1996		1998		2000	
Net2Phone	Launches its fi product. Only F in the US			Partnership with NetScape. Net2Phone goes public on Nasdaq	Yahoo invests 150M USD. Stockprice peaks at 60 USD	Launches CommCenter, same features as first Skype BETA
Skype			Zennström presents his "Skype" idea to management at Tele2	Original Skype team meets while working for for Tele2 / Everyday.com	Friis & Zennström quit their jobs at Tele 2	FastTrack and KaZaa launches
Internet users globally* (in Millions)	36	70	147	248	451	513
	2002		2004		2006	
Net2Phone		e changes their strateg to focus on	Signs several smaller partnership, among them Cable & Wireless on Cayman Island	Net2Phone has "a couple of 100,000 members users"	Net2Phone taken off NasDaq, acquired by IDT Corp for 160M USD. Stockprice 2.05 USD	
Skype	Draper invests 250,000 USD in Skype to valuation of 5M USD. KaZaa sells to Sharman NetWorks	ment starts (Feb)	Founders are on front page of Fortune Magazine. Skype 1.0 and SkypeOut is launched	Skype is downloaded more than 100M times. Ebay acquires Skype for ca 3B USD		
Internet users globally* (in Millions)	587	719	817	957	1,093	

http://www.internetworldstats.com/emarketing.htm

5. REASONS FOR GROWTH

5.1 Size of Potential Market

As expected, market potential is a key success factor when launching new products (see for example Cooper & Kleinschmitd, 1987). But as a startup with limited funding and an un-proven business model, it's difficult to roll out a global organization from day 1 - it requires resources as well as time.

Net2Phone's PC-to-Phone offering required local payment methods to be implemented in each new market, and local presence to drive marketing and commercial relations. Therefore, Net2Phone's initial target market was limited to mainly the US.

Skype on the other hand managed to maximize the target market by offering a *standardized product* to all their users around the world, and by offering the same basic features (no paid services). The only localization that was done initially was translation of website and the software.

This approach of a basic and standardized product is in line with Theodore Levitt's theories. In the early 1980s, Levitt published an article in which he offered something of a middle way between the customer focus of segmentation, and the efficiency of mass marketing. He believed that new communication-, transportation-, and travel technologies were creating a global and homogeneous market:

"...The result is a new commercial reality - the emergence of global markets for standardized consumer products on a previously unimagined scale of magnitude". (Levitt, 1983)

Theodore Levitt saw the birth of a new kind of company: the global corporation, selling the same thing everywhere. This is what Skype tried to do. Skype could launch in new countries virtually without any additional work what so ever. Skype could target soccermoms in Texas, teenagers in China, and small-and-medium sized businesses in Örebro –

basically anyone in the world with a computer and an Internet connection - all from their offices in London and Estonia.

All from the beginning, Skype was meant to be a *mass-market product*. Even though Skype initially tried to win over early adopters, the product was not built for them – it was built for their mothers, people who had no prior software experience. Skype saw how VOIP software could attract a mass market, rather then a segment of enthusiasts that used Net2Phone. Earlier research has shown that the tendency to target smaller segments instead of a potential mass market is often the reason why many "market pioneers" fail, and other so called "early leaders" tend to succeed better in the market place (Golder & Tellis).

Skype's global approach and mass-market focus can only partly explain the difference in market potential between Skype and Net2Phone. The advances of Internet in the late 1990s and early 2000 changed the playing field completely. When Net2Phone launched in 1996, the market size was 36M (total number of Internet users globally). When Skype's launched in 2003, the number of Internet users were 716M, 20 times as many. Andy Abramsom believes that Skype having a greater broadband audience at their disposal was one of the key success factors of Skype. And as Di Benedetto describes (1999), timing is key to win market shares for a new product.

5.2 High Value Offering.

Skype's offering of free calling should be seen in perspective to what people spend on calling in general.

- According to a survey done by Canada's National Statistical Agency, a Canadian household spent over 1,000 CAD per year on regular and mobile phone calls (around 6 800 SEK), in 2004.
- In UK, an average household spent more than the double £960 (13 100 SEK) (Ofcom) per year.

Kotler (2000) use a straightforward model to explain what value is to a customer, and how it determines the customer's choice:

Functional benefits + emotional benefits

Monetary cost + time costs + energy costs + physical costs

According to this model the value of a product is simply the benefits in relation to the costs, and potential customers will prefer the offering with highest ratio (value). That helps us understand the power of Skype's offering. It is a product that manages to combine great benefits (global calling) with low costs (free to use, easy to get started).

As the examples from Canada and the UK shows, people spend big money on telecommunications, which is why Skype's "Free calling anywhere" is such a strong global message (benefit) - long-distance and international telecommunication is normally expensive.

Looking back, this seems like the obvious way to market a VOIP-solution. But Net2Phone never positioned their product this way. Instead they promoted their PC-tophone offering as a replacement to their existing phone company, both to their end-users and to potential cable partners.

In addition to being free, it was easy to get started using Skype, which additionally lower the barriers of entry (or costs) for the users. Skype.com was originally a big 'download here' button - all visitors to Skype knew why they should use the product, and how they should get started. Once Skype is downloaded and installed, most users instantly recognize the user interface and are ready to start using the product.

Since Skype works behind firewalls and NATs, the application usually works right from the moment you have downloaded and installed the application. Other centrally based services, such as Net2Phones CommCenter, usually require the user to spend some time learning how to use the service and configure their computer, which makes them less likely to become a user. Both Bengt Möllerud and Sten Nordell believe the low barriers of entry (free and easy to use) are among most important differences between Skype and earlier competitors.

Similar to Kotler's model above, Wood & Moreau (2006) explained that in order to quickly spread through a population, a product has to be evaluated positively on certain key criteria. They argued that these are:

Table 7: Wood & Mureau

- ➤ Benefits
- ➢ Costs
- Advantage over competitors
- ➢ Complexity

Again, it's easy to understand that Skype has clear advantages over Net2Phone on all these points: better benefits (quality), lower costs (free), and less complexity (easy to use).

5.3 Viral Product Features

Early adopters who tried Skype had usually low expectations on the voice quality. As the quotes by Bill Campbell shows, Other VOIP-services such as Net2Phone had been a disappointment for a long time, with time lags and bad echo. With Skype, you could have a voice call with the same quality (or sometimes better) than you'd except from a normal phone. This is confirmed by Sten Nordell, who thinks the call quality and stability of Skype differed dramatically from earlier competitors.

Since Skype exceeded the expectations of these early adopters, many of them became satisfied customers and they then helped to fuel the word-of-mouth that took Skype from a niche technology to a mass-market product. Interestingly, the poor quality of the Net2Phone products therefore plays a part in explaining the growth of Skype.

Ditcher (1966) explains why customer satisfaction is related to word-of-mouth. There are 4 main reasons why anyone would engage in word-of-mouth, 3 of which are relevant here:

Table 7: Dichter

- Product engagement "by telling other about the product, I will re-live my own experience"
- Own engagement "by telling other about important news, people will find me more valuable".
- Friend engagement "I want people who I like to know about this great product, since I care about them."

Thanks to the *quality of the product*, all of these factors were working in Skype's favor, once the user had downloaded and tried Skype.

But there's another more important reason why people wanted to tell their friends about Skype. For any closed network such as Skype's, the value of the product is directly linked to whether or other people are using the same product. This effect is called Metcalfe's law (Downes and Mui, 2000):

Metcalfe's law:

The value of a telecommunications network is proportional to the square of the number of users of the system (n^2)

So Skype users don't only tell their friends about the service because it's a great product, but also because they directly benefit when more of their friends are using the service. They won't have anyone to talk to otherwise. Several of the interviewed experts (Möllerud, James) have mentioned the fact that Skype was a closed network as a reason for growth.

Skype surveys prior to the eBay merger showed that 70-80 percent of all new users said that they first heard about Skype from a friend, which helps to prove how important viral growth was for Skype's growth.

This is another reason why focusing on paid-for services was a mistake for Net2Phone it removed the inherent viral feature that is associated with offering a free service within a closed network. Net2Phone members did not benefit a dime from spreading the word about their service.

Andy Abramson confirmed this view, and says that the viral features of Skype are key to understand the growth.

Word-of-mouth and viral marketing mean that the growth should be exponential, and looking back at Skype's growth numbers you can spot an exponential trend. The number of new users signing up each day has gone from around 30,000 when I joined Skype in January 2004, to 60,000 at the end of the year, up to over 200,000 in late 2005. And as as long as each new user on average convinces more than one friend to sign-up Skype, the growth rate will increase, rather than decrease.

This is how Rogers (1983) describes the viral process, and it fits well in on Skype: "Adoption of a new idea is the result of human interaction through interpersonal networks. If the first adopter of the innovation discusses it with two other members of a social system, and each of these two adopters passes the new idea along to two peers, the resulting distribution follows a binomial expansion."

5.4 Global Seed Strategy

Building awareness on a global scale as a start-up is naturally tricky, since you lack money to spend on media. Net2Phone tried to build awareness and market shares through partnerships, and actually did pretty well – the company had partnership with some of the biggest Internet companies around at the time. Skype successfully followed the same strategy and managed to penetrate countries, which would be hard to get traction in alone (China, Taiwan, Japan, Poland etc), and distribution channels that would have been out of reach otherwise (retail and hardware).

In addition to these partnerships, Skype managed to drive initial awarenes through clever PR. The combination of PR, partnership, and the viral nature of Skype meant that the acquisition cost per new member was extremely low.

PR is usually not a natural part of a marketing department, and it is traditionally not used as a pure promotional tool. But in recent years, some disciplines of PR has emerged that are focusing on customer acquisition: One of them is MPR (marketing public relations), which is seen as "specialist subset of public relations, limiting it to an organization's interactions with consumers and stressing its ability to provide highly credible messages at lower expense than advertising". (Pelsmacker & Kitchen, 2004).

Harris (1993) mentions Ford as one example of a company that has managed to do this successfully:

"The Ford Motor Company achieved a 50 percent brand awareness level among consumers and had orders of 146,000 Taurus and Sable automobiles before they were advertised or released for sale, based solely on public relations."

Pickton and Broderick (2001) highlight the success of The Body Shop, which spends minimal amounts of its communications budget on mass media advertising, concentrating instead on sophisticated MPR. They suggest that editorial coverage may actually have up to five times the credibility of advertising.

According to Kotler (1984), MPR is most useful for products with certain characteristics. They should:

- have an interesting story
- need stimulus for the sales force
- ➤ need credibility
- ➤ have a limited budget

As Kotler would expect, PR was a perfect tool for Skype: the company had as an interesting story thanks to KaZaa, a small budget, and was in need of some credibility. When they launched Skype and said that they wanted to make all phone calls free –

which would mean drastically change an industry with revenues of US\$1.4 trillion – journalists from all over the world had an instant interest in the story and many wrote a piece about Skype. This is how Kat James describes the uptake:

"The results were incredible with huge amounts of top tier quality coverage garnered in every major market in the world in both print and broadcast. Journalists quickly understood Skype and the benefits it bought to consumers and many of our key messages were picked up in articles... I'd say PR played a large part in Skype's phenomenal growth, but this couldn't have been achieved without a fantastic product and founders with an interesting background, which helped gain the initial interest and attention".

5.5 A Different Business Model

As discussed previously, Net2Phone used new technology (VOIP), but a traditional business model. They used the cost advantage of VOIP to offer low prices for international calling, but still charged for the calling.

Skype 's was actually using an old technology, but the business model was different. They main idea was to give away the core product for free, and the up-sell additional services. This was different to Net2Phone.

There are several authors who believe that a firm's technology advantage is far less important than having a superior business model. One of these is Timmer (1998), who has written about different business models in the new economy, and how they influence the performance of the company. In his book he presents 8 detailed case studies of companies who have developed innovative business models, and describes the lessons that can be learn from their success. His conclusion is that in order to survive and thrive, companies need to focus more on their business models, and less on technologies.

Kelly (1998) argues that as technology evolves over time, prices will inevitably get lower, and quality improve. The best strategy for a company is then to anticipate the price reduction, and offer their products for free. A free product will be faster adapter by the masses, which create ubiquity – which is what actually creates increasing returns. Kelly lists a few examples where free products make sense in the consumer software industry (such as browsers). He also thinks free products is the right strategy for products within other industries (such as mobile phones). A company should try to figure out how much to give away for free, and then charge higher rates for related products and services.

Shapiro & Varian (1999) comes to the same conclusion, but from a different angle. They're arguing that informational products have high setup costs, but low marginal costs. Even though VOIP-products and other software are no informational product in the traditional definition, they have many of the same characteristics - especially if they're distributed electronically. It can be very costly to develop the product, but once it's done, it's cheap to distribute.

The authors suggests that the right strategy in these circumstances is to try to win large market share early on, and use this market share to achieve cost-leadership. Since market-share is so critical, a free (or cheap) product is important. The company can then offer additional services for a high premium, to customers who are willing to pay. Again, this strategy is easier to achieve in the network economy, since the basic product is the same for all customers. The authors mention several companies who have had success with similar business models, Microsoft being one of them.

5.6 Conclusions (1)

It's obvious that Skype's phenomenal PR was an important factor that helped to seed the market and ignite Skype's growth. So were the partners that Skype managed to attract, and Skype's decision to implement a software business mode. But most of Skype's success can be ultimately be derived from the different aspects of the product itself. And few journalist or partners would have been interested in Skype if the product was not delivering.

Below is a table that shows what product attributes that helped Skype grow in contrast to Net2Phone, and an overview of the theories that explains why it's important.

Empirically, the most important lesson from Skype is that: if you manage to build a product that a lot of people **can** and **want** to use, and it's **inherently viral**, growth will come.

Attributes	<u>Skype</u>	<u>Net2Phone</u>	<u>Theory</u>	
Market Potential	Global / mass- market	US / early- adopters	Cooper & Kleinschmidt Lewitt Di Benetto	
Value	High: free global calling, easy to use	Medium: cheap domestic calling, but difficult to use	Kotler Wood & Mureau	
Viral Features	Yes – quality and closed network	No real viral features	Ditcher Metcalfe Rogers	

Table 8: Skype Product Attributes

6. GENERAL DISCUSSION AND IMPLICATIONS

As seen in chapter 5, there are indeed theories that can help to explain bits and pieces of Skype's growth. But even though the traditional tools can be used to create a broad theoretical outline, they seem inadequate when it comes to guiding people trying to repeat Skype's success.

Most theories are concentrating on specific details, without putting them into the wider perspective, which is necessary to gain real insight. For example, Metcalfe's Law can explain why a closed network is so important for viral growth, but the theory doesn't help us see the whole picture.

Some theories are too general in their approach. As an example, think about Kotler's traditional PPPP-model. In the case of Skype, "Price", "Place", and "Promotion" are all basically given from the start. Skype was for free (Price), distributed over the Internet (Place), and had limited budget for marketing (Promotion). The only factor left to really play with is the product, and the theory is not giving any valuable lessons for people developing consumer software or web applications.

This is a general observation - most marketing theories focus on what do with a product you already have – how to coordinate a product launch, or drive demand for *existing products*. As Kotler say, marketing has been seen as "the art of selling", and marketing about "creating, promoting, and delivering goods and services" (Kotler 2000). But since Internet had made distribution question almost irrelevant, and a single PR person handled promotion, this approach is not relevant. Instead, the success of Skype had to with decisions and strategy around product development.

Luckily, Peter Drucker's mission statement for marketing gives us a better perspective on the job of marketing in companies such as Skype:

"...the aim of marketing should be to make selling superfluous. The aim of marketing is to know and understand the customer so well that the product or service fits him and sells itself. All that should be needed then is to make the product or service available". On a

very high-level, Drucker's paragraph perfectly explains why Skype managed to grow so fast. But it lacks in detail. So, what are the key success factors for companies wanting to build a product that can attract millions of active users within months?

Conclusions (2)

Following from our empirical findings and the theoretical background described in the thesis, we can create 4 guiding principles that I believe can be useful for companies trying to repeat Skype's growth rate. These are not aimed at a traditional marketing department, since they are mostly focused on product development strategies.

1: Maximize the number of people who can use a generic version of the product

This is done by:

- a) Standardizing the product, and
- b) Keeping a mass-market focus

The bottom line is to make sure that the whole world can use the product, without any (or minimal) time-consuming adaptation to local preferences for new markets. At the same time, it must be localized enough to attract not only early-adopters and segments, but also the mass-market. This requires the product to be flexible, so localization can be handled outside the core team.

2: Maximize the value the product offers

This is done by focusing on:

- a) Making the benefits as attractive as possible, and
- b) Keeping the costs down

This seems obvious, but it's evidently not very straightforward. If the first rule is about making lots of people want your product, the second rule is about making these people really want it. Skype's technology allowed the company to offer high-quality low-cost

global calling, which of course is valuable to people. But just as important was the easeof-use of the product – people immediately knew how to use it, which reduced the costs associated with trying out the product, and boosted growth.

3. Seed the Local Market

Seeding the market is done by attracting the right:

- a) Publicity
- b) Partners

There's no point in trying to buy market shares with traditional advertising. Startups generally must rely on viral marketing, as soon as they've established a proper brigdehold in the local market. A startup can successfully seed the market by using the voice and resources of bigger partners and the press. But again – without the right product it's hard to generate interest.

Build the product to sell itself

This is done by delivering:

- a) High quality, and
- b) Inherent viral features (for example, a closed network)

The fact that Skype actually worked well was a pre-requisit for going mainstream – people loved to tell their friends about it. Secondly, since their friends had to be on Skype for the product to be worth something at all, the viral effect was explosive. Skype's closed network is just one example of how a product can be inherently viral.

Future Research

I believe these four factors above can help explain the success of Skype, as well as other fast growing Internet companies: MySpace, YouTube, Hotmail, Flickr, and so on. As

stated in the methodology section, my thesis do not try to confirm these conclusions, but this could be an interesting area for future research.

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