

Vodafone's Experience with Videoconferencing

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Motivation for Videoconferencing

Vodafone's original motivation for videoconferencing was reducing air travel, and thereby the cost of air travel

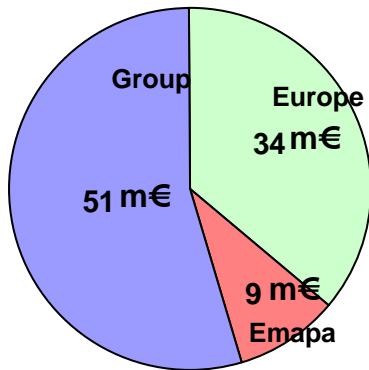
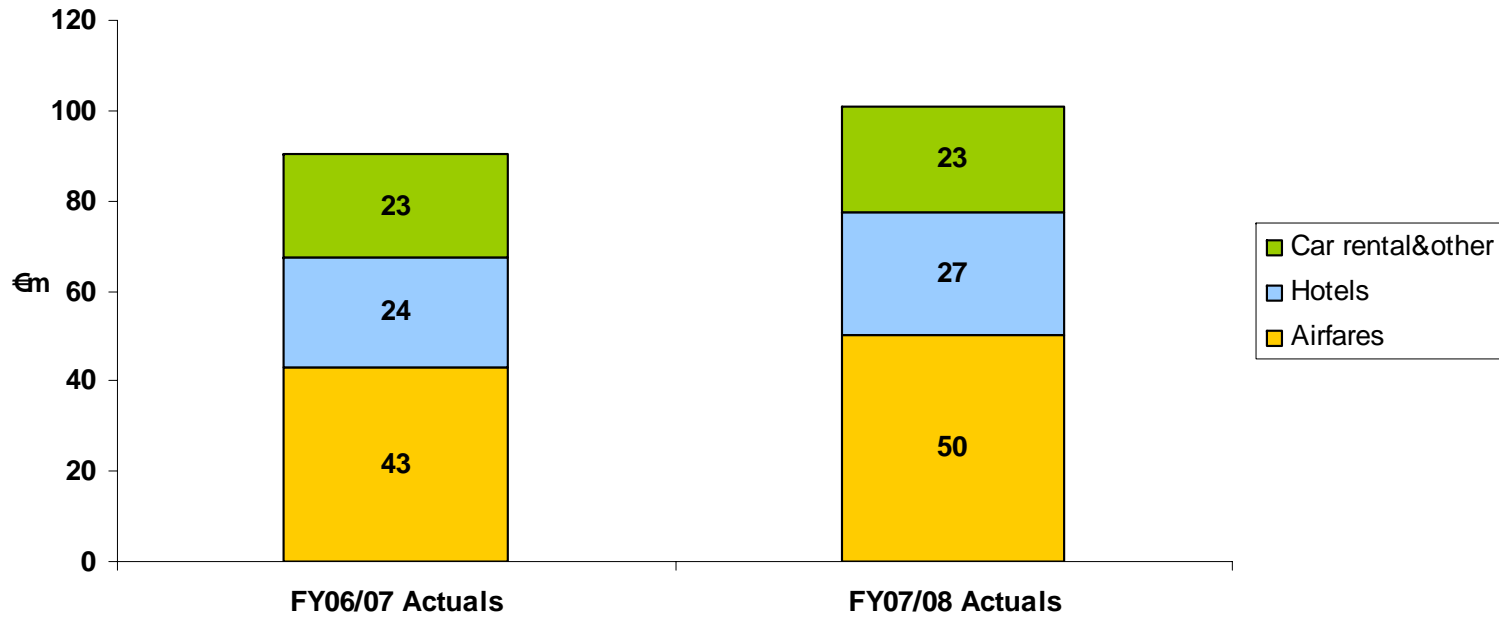
Vodafone Group Services, at the beginning of 2004, was a small organisation tasked with creating the reality of 'One Vodafone' from the vision of Arun Sarin, our CEO.

The number of employees exploded as certain functions moved to the global organisation, and the amount of air travel, similarly, exploded.

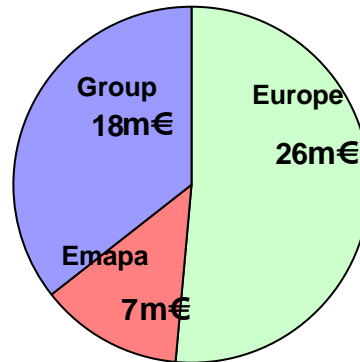
One of the main sources of air travel was between the UK and Dusseldorf. Vodafone, with our purchase of Mannesmann D2, had created a dual hub organisation, and people were spending a lot of time and money going back and forth.

Reducing air travel was seen as a cost-saving measure.

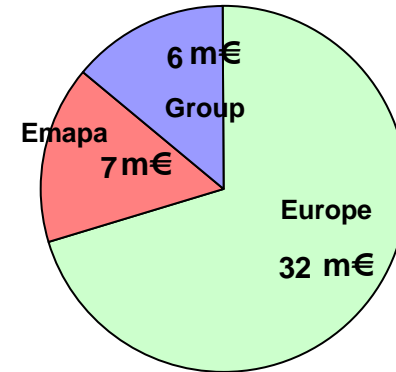
Travel spend



Airfares (2 years)

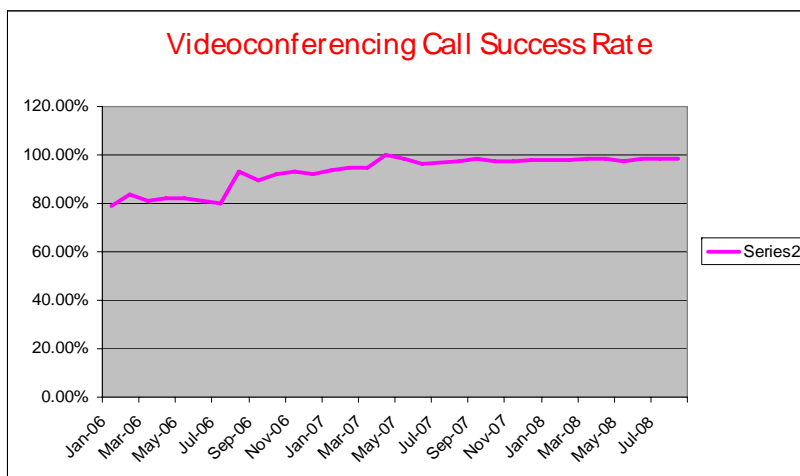
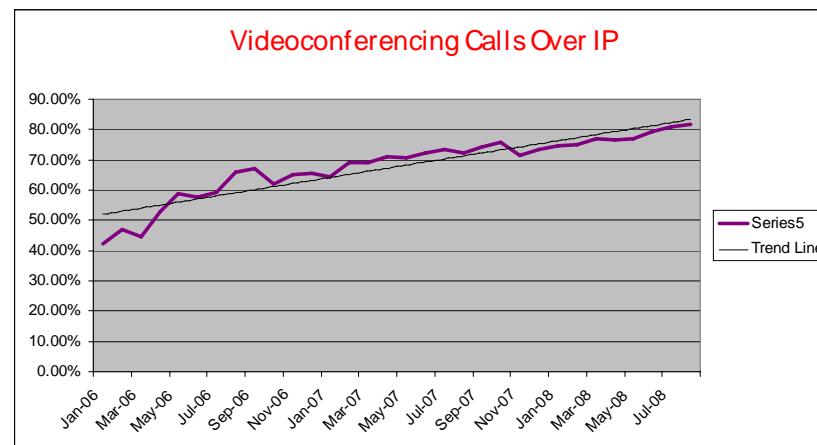
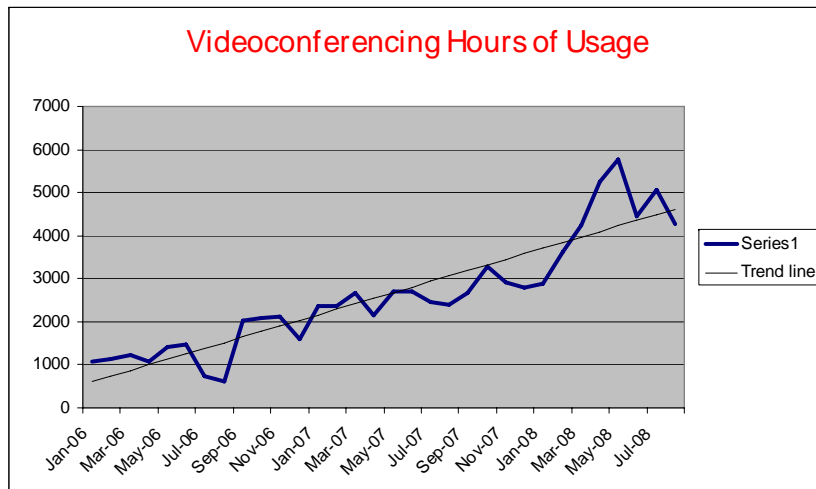


Hotels (2 years)



Car rental and others (2 years)

VC Usage: The Numbers



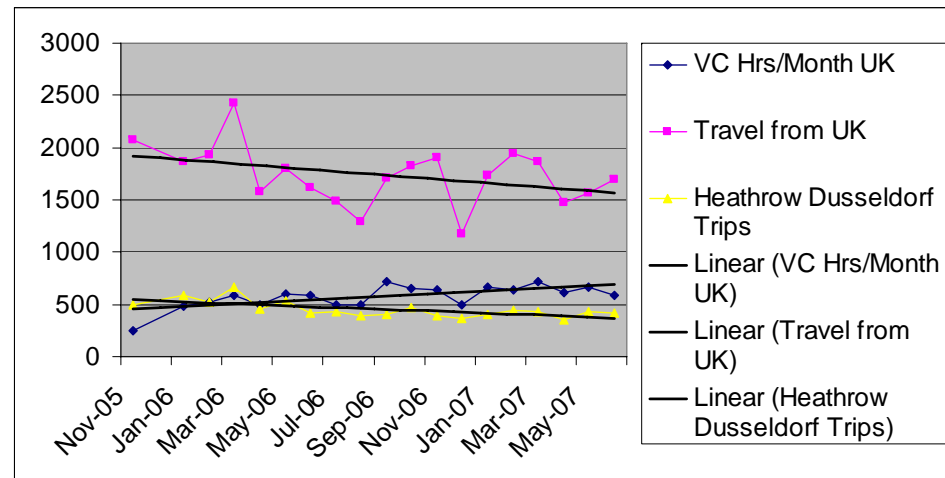
Usage is up 300% over the last two years, number of failures is one-tenth that of two years ago, and over 80% of all calls are over IP, compared to less than half two years ago.

UK Case Study: Real Travel Savings Realised by VC

From 2004 through 2005, VGS Newbury and Vodafone UK saw year on year growth in travel of 35%. In November, 2005, videoconferencing lounges in Newbury and Dusseldorf were introduced. From that point onwards, the growth in travel was halted, and then reversed, so that the trend now is for year on year reduction in travel by 22%. The main beneficiary was the route between London and Dusseldorf, which has seen an average drop of 33% over two years in the number of trips. There were no factors during that period which can explain the drop aside from the introduction of videoconferencing. In fact, travel policy for Newbury employees was considerably loosened in 2007 in terms of approvals and process.

A couple of important points about the graph below:

- The peaks and troughs in travel follow very closely those in VC. This suggests that the two are being used for similar purposes, and that the requirement for each follow very similar patterns.
- It does NOT show, at this point, a hard bottom for how much travel VC can reduce.
- The causal link seems to mean that for every one hour of VC, one trip is saved.



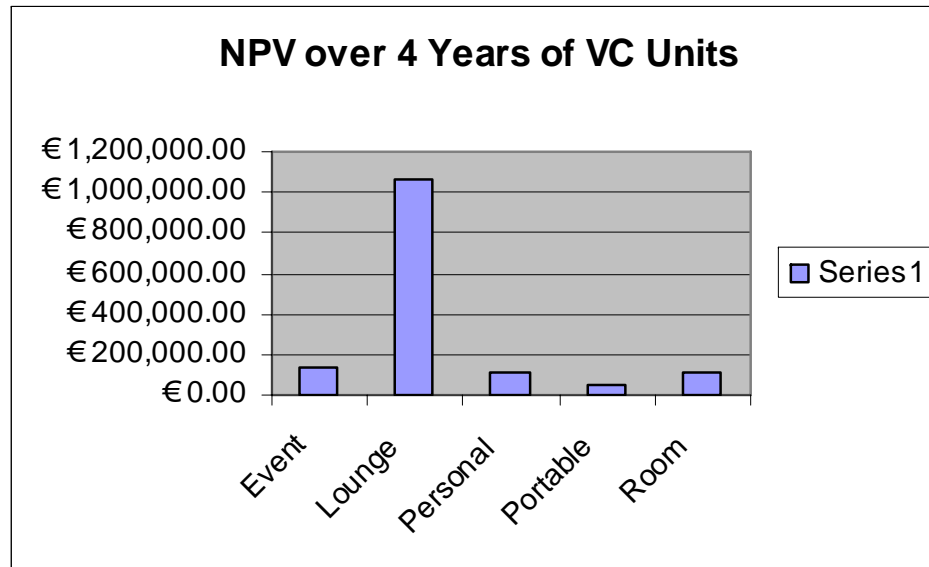
This is not a fairytale! It is based on 18 months of real travel and VC data! It clearly shows that one hour of VC should result in the elimination of roughly one trip.

UK Case Study: Value of Individual VC Units

Not all VC units have the same value to the business. Units in individual offices have less value, in simple travel savings, than those in VC lounges. There is a positive and compelling NPV, however, for ALL types of VC units. It should be understood, however, that a senior executive's time is worth a lot, and that the value is calculated solely against the cost of an air ticket, not taking into account lost productivity, hotel, or even ground costs, all of which can be presumed to be higher for senior executives.

The NPV below was arrived at using the following methodology:

- The historical split between the number of minutes done on each type of unit was calculated, and the historical average number of hours of usage calculated.
- The historical average number of hours was multiplied by the historical average per-trip price (€777) to arrive at the monthly savings, and then multiplied by 12 to get a yearly saving average.
- The NPV is calculated using a 25% depreciation, over 4 years, and the average cost of the unit deducted from the first year cost, and the 14% support cost deducted from subsequent years.



How We Did It

In order to realise the goals, Vodafone needed to get employees to change their behaviour: Instead of travelling, they needed to use VC. The factors important in getting this to happen are below:

1. Availability—There had to be facilities available for videoconferencing, and they had to be available when and where people needed them.
2. Quality—A lot of users had bad experiences with poor-quality and unreliable ISDN videoconferencing. Overcoming that required a big jump in quality.
3. Convenience—Booking flights is quite a convenient process at Vodafone. We needed to make using VC equally convenient.
4. Awareness—Making users aware of the benefit to themselves is vitally important.

How we did it: Availability



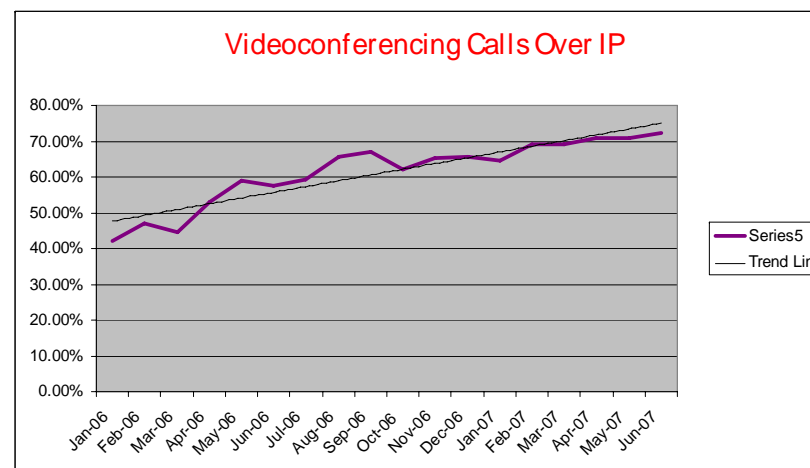
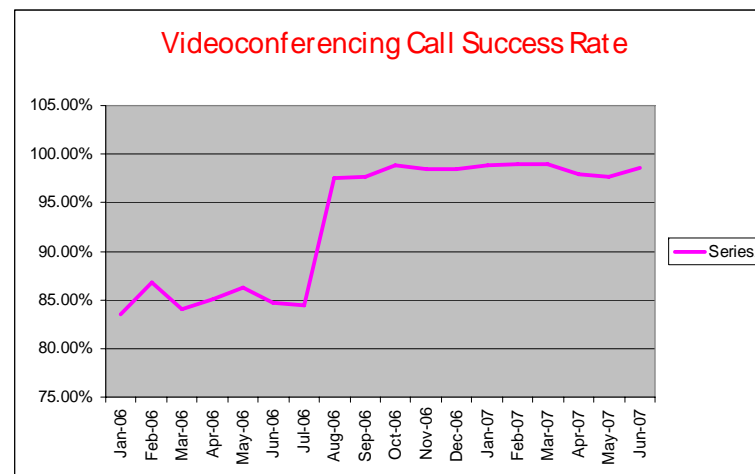
Videoconferencing Lounges

These are dedicated VC facilities, located in our atrium, available to any employee, and can be booked ad-hoc.

Office VCUs. In addition to lounges, Vodafone encouraged directors to install Tandberg 2000 systems in their offices. This is the ultimate in availability, and because directors typically travel a lot, there is a good business case.

How we did it: Quality

- A program to move away from ISDN calls and on to IP was started in September, 2005. To date, Vodafone have moved 14 operating companies on to our VCoIP infrastructure. From no calls done on IP before 2005, and a failure rate of roughly 25%, Vodafone now does roughly 80% of calls over IP, and an overall failure rate of less than 2%.
- An RFP was done to identify which vendor we would use. Tandberg was chosen based on, to a large extent, the user interface experience: All MXP codecs had the same interface, making it very simple to use. All Vodafone units have multipoint and presentation capabilities.



How we did it: Convenience

- Vodafone has made it easy for people who need VC to order new units, by coordinating with our vendor and our SCM department to make it as smooth as possible.
- Having a global address book was seen from early on as a vitally important thing, because it allows users to simply search for a number and find it very quickly.
- The lounges were booked using paper sheets. Though not the most convenient in terms of booking ahead, they are very convenient for just walking up to and reserving. They can't be booked more than 2 weeks in advance, and so even the day before are usually available when required.

How we did it: Awareness



A poster campaign with the theme 'Travel VC class' was undertaken. The campaign, which also included postcards, and a web page, used animals to convey the message to use VC in a humorous way.

There were three themes of the posters:

- Do it for your own sake
- Do it for your family's sake
- Do it for the sake of the environment

There was no poster which said "use VC to save Vodafone money."



How we did it: Awareness

Do you really need to fly?

Sometimes there are quicker and less stressful ways to get from A to B. Why not take your head out of the sand and travel VC Class?

Vodafone's new certified videoconferencing (VC) rooms and lounges take the pain out of travelling. To find out more visit <http://intranet.vodafone.com/VC-Class>.

Travel VC Class.




Are your loved ones missing you?

If you feel lonely when you travel on business, you can be sure that your family does too. Now you can have face-to-face meetings abroad and still be home in time to give your little bunnies a goodnight kiss.

Vodafone's new certified videoconferencing (VC) rooms and lounges take the pain out of travelling. To find out more visit <http://intranet.vodafone.com/VC-Class>.

Travel VC Class.



Global Videoconferencing Service Overview

June 2008	AL	AU	CZ	DE	EG	ES	FJ	GR	HU	IE	IN	IT	MT	NL	NZ	PT	RO	TR	UK	VGS
Global VC Vendor	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓		✓		✓
Global VC IP NW			✓	✓	✓	✓		✓	✓	✓		✓		✓		✓	✓	✓		✓
Global VC Mngmt System			✓	✓					✓	✓				✓		✓		✓		✓
Global VC Directory Access			✓	✓					✓	✓		✓		✓		✓	✓	✓		✓
Desktop VC w. Total Communications														✓						✓
Number of Systems	1	17	17	32	4	46	0	3	3	13	29	136	1	21	14	18	21	3	17	167
Total Systems:																				563

Services:

- Global VC Vendor:** Global SCM negotiated for the best possible pricing, and the Global VC team evaluated the best quality, and selected a global VC vendor, and a global VC catalogue. All OpCos who want are able to use this global catalogue, and take advantage of very competitive pricing for Tandberg and Codian equipment.
- Global VC IP Network:** Based on the One Network, the global IP VC network allows reliable calls over Vodafone's IP network, saving on ISDN costs, and dramatically increasing reliability and quality.
- Global VC Management System:** Allows administrators to monitor all of their VC systems, to pull off statistics, and receive warnings when systems need maintenance.
- Global VC Directory:** This directory lists all systems that we are aware of, and make it very simple to dial another user in any OpCo. It is pushed out centrally to any endpoint which registers with the directory/management server.
- Desktop VC w. Total Communications:** Allows VC users and Microsoft Office Communicators to call one another over the Total Communications infrastructure.

Challenges

- Videoconferencing is currently based on H.323 architecture, and will need to move to a SIP architecture to be able to integrate with Total Communications.
- Moving to a more global architecture which allows more central management and support.
- Integrating videoconferencing into a total communications solution, supporting voice, conferencing, PC-based, and so on.
- Integrating OpCos more closely