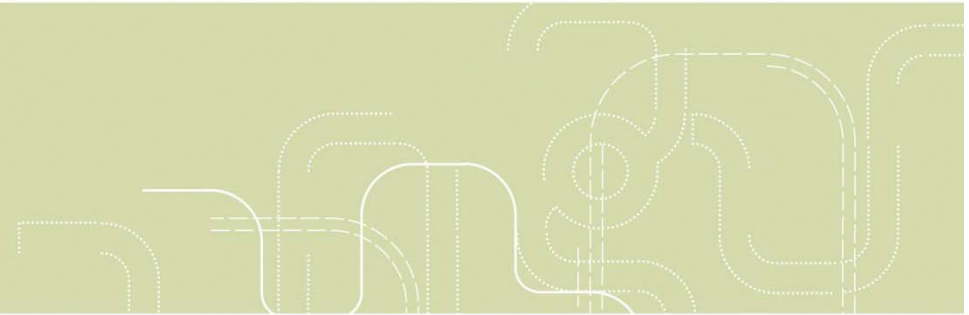# Emergent use of videoconferences among business travellers: Norwegian experiences

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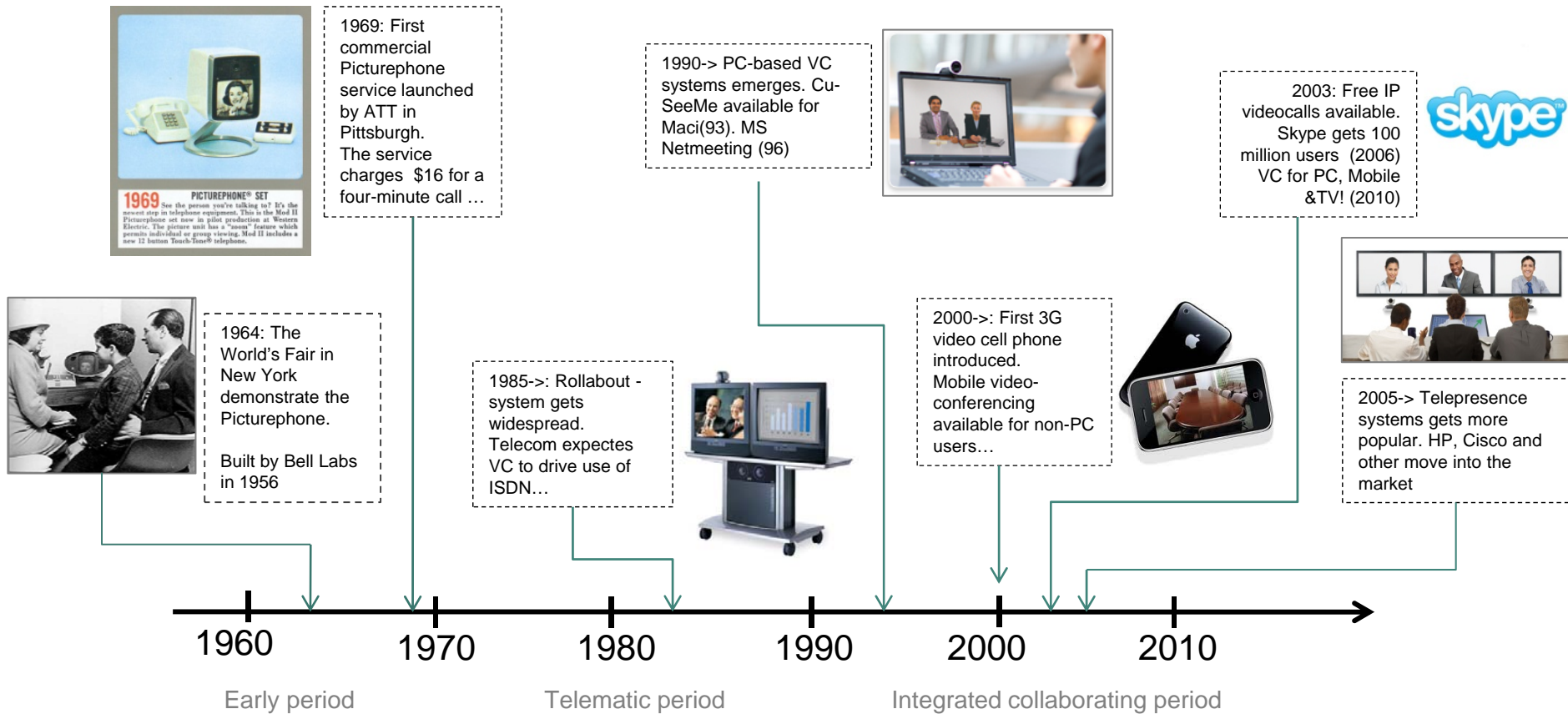Department of Communication and Accessibility

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AGENDA

- How are videoconferences used today?
- What are the motives driving the use of videoconferences?
- How will the new usage patterns affect on the need for bussines travels?

Videoconferences then and now…

1969: First commercial Picturephone service launched by ATT in Pittsburgh. The service charges $16 for a four-minute call …

1990-> PC-based VC systems emerges. Cu-SeeMe available for Maci(93). MS Netmeeting (96)

2003: Free IP videocalls available. Skype gets 100 million users (2006) VC for PC, Mobile &TV! (2010)

1964: The World's Fair in New York demonstrate the Picturephone.

Built by Bell Labs in 1956

1985->: Rollabout - system gets widespread. Telecom expectes VC to drive use of ISDN…

2000->: First 3G video cell phone introduced. Mobile video-conferencing available for non-PC users…

2005-> Telepresence systems gets more popular. HP, Cisco and other move into the market

1960   1970   1980   1990   2000   2010

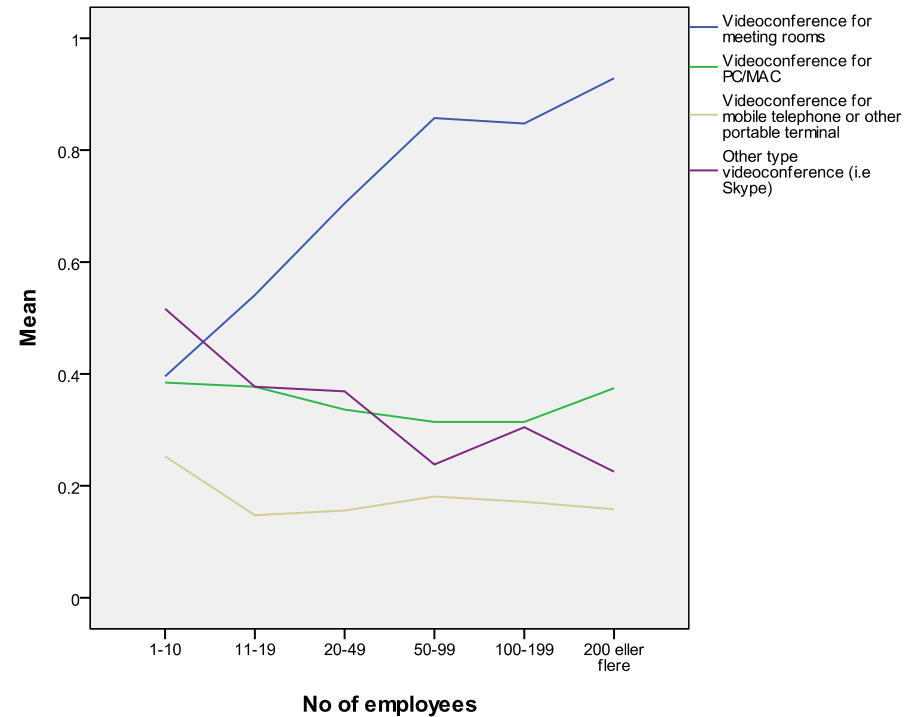Early period   Telematic period   Integrated collaborating period

The data: a web survey of Norwegian business travellers

- Recruitment
  - Business passengers were recruited at Oslo airport, Gardermoen, in two weeks in December 2009 and January 2010.
  - The recruitment was done in the peak hours on weekdays when the number of business passengers is highest

- Sample
  - Approximately 1500 usable responses

- Themes
  - Their present business travel
  - Last videoconference
  - Attitude battery to explore opinions to use of videoconferences (VC), and business travels in general

- This presentation give some early insights..
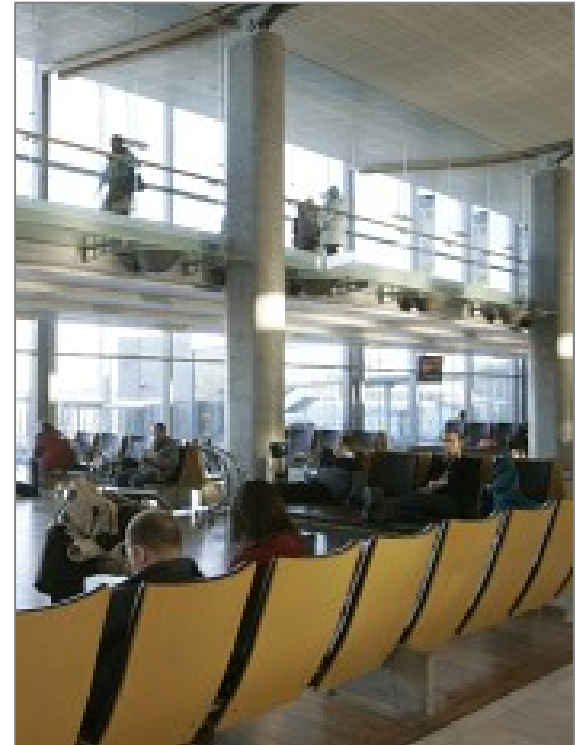
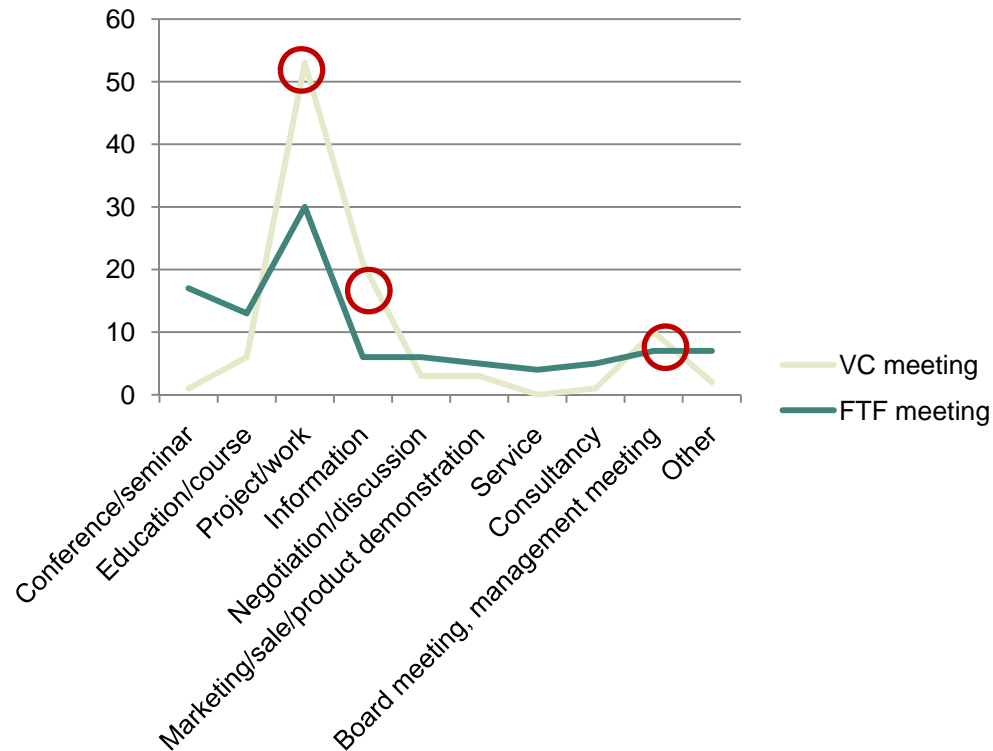# Access: Room-based VC systems are still dominating…

- Videoconferencing systems are widely accessible:
    - 68% of all travellers have access to videoconference technology
    - Almost 3/4 of those with access to VC technology had participated on a videoconference last year.
- Room based systems are still most common:
    - 54 % of all business travellers have access to room based VC
- Alternative systems winning ground
    - Almost every fourth business traveller have access to PC based conferences (24%)
    - Mobile videoconference systems are available for 11% and 20% use other systems (i.e. skype)
- Small companies tends to rely more on desktop conferences and use of mobile terminals*

Legend:
- Videoconference for meeting rooms
- Videoconference for PC/MAC
- Videoconference for mobile telephone or other portable terminal
- Other type videoconference (i.e Skype)

Y-axis: Mean
X-axis: No of employees (1-10, 11-19, 20-49, 50-99, 100-199, 200 eller flere)

* The difference is significant for VC-meeting rooms and other systems (skype) on a 0.000 level.
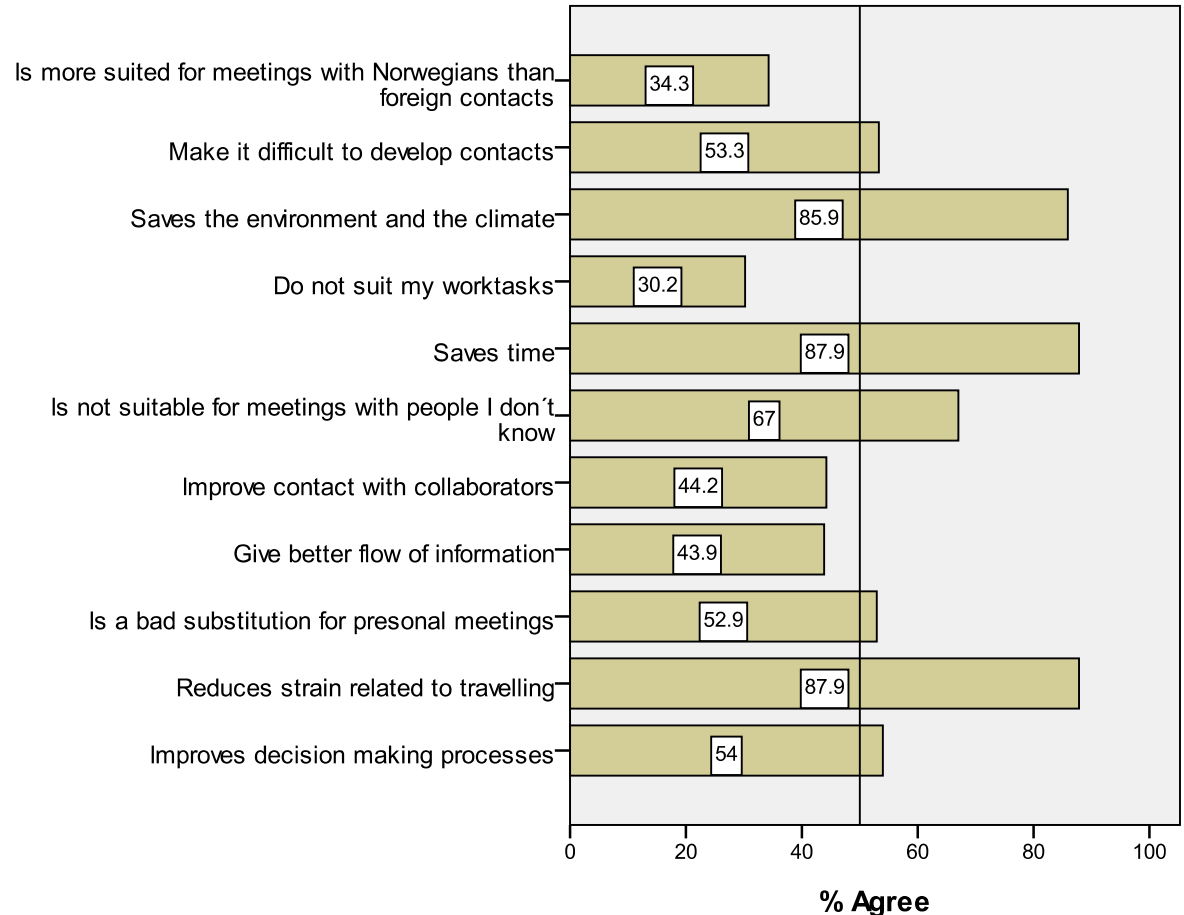
Videoconferences differ from FTF-meetings along several core dimensions

- Preparation
  - VC demands less time: About 50% of the VC meetings are planned within a week's horizon.
  - Not more than 20 percent of the face-to-face meetings have such a short planning horizon

- Duration
  - VC are shorter: An average VC lasts for 2 hours The FTF where on average three times longer (i.p. board meetings and conferences)

- Participators
  - Videoconferences are mainly business internal: Over 60% of all VC are intra-organizational meetings, compared to 40% of the FTF meetings

- Type of meeting
  - Most VC are (internal) project meetings.
  - Meetings for immediate information sharing and board meetings are also common

- VC and FTF meetings seems to fulfil slightly different needs

Chart legend: VC meeting, FTF meeting. Categories: Conference/seminar, Education/course, Project/work, Information, Negotiation/discussion, Marketing/sale/product demonstration, Service, Consultancy, Board meeting, management meeting, Other
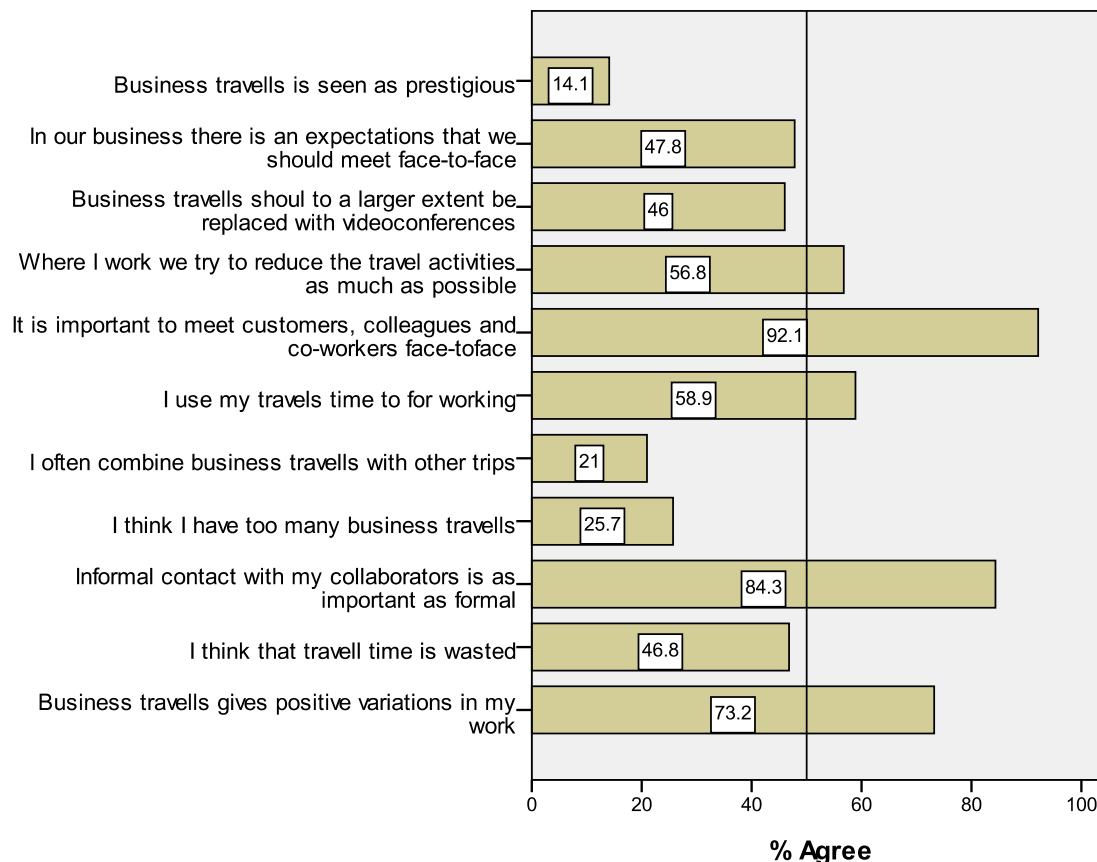
Videoconferences are motivated by saving of time, travel strains and environmental concerns

- Highest ranked benefits related to VC are possibilities for time savings and reduction of travel strain and environmental benefits (over 85% agree)
- Yet; a majority also feel that VCs are not suitable for meetings with new contacts (67% agree), and that VCs makes it difficult to develop new contact (53% agree)

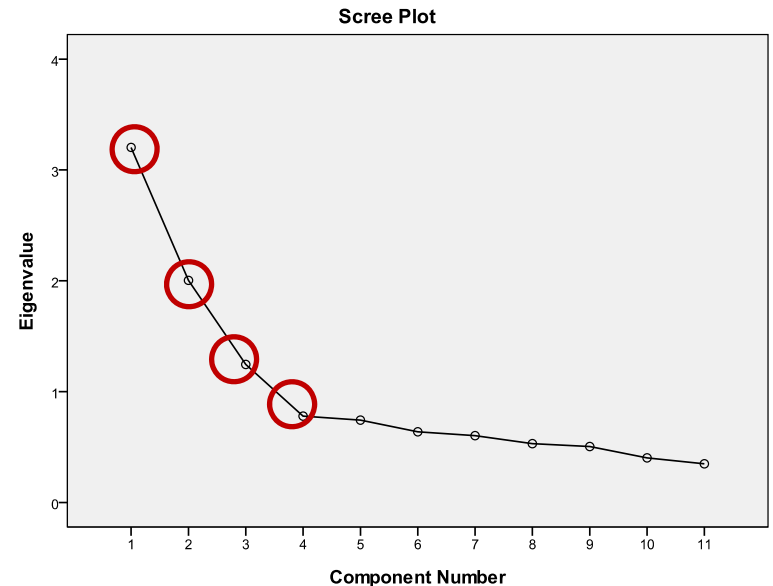| Statement	% Agree
Is more suited for meetings with Norwegians than foreign contacts	34.3
Make it difficult to develop contacts	53.3
Saves the environment and the climate	85.9
Do not suit my worktasks	30.2
Saves time	87.9
Is not suitable for meetings with people I don´t know	67
Improve contact with collaborators	44.2
Give better flow of information	43.9
Is a bad substitution for presonal meetings	52.9
Reduces strain related to travelling	87.9
Improves decision making processes	54

% Agree

Business travells are motivated by a need for informal contact and network development

- A large majority see the FTF meetings as important (92% agree)
- The informal contact related to FTF meetings is seen equally important as the formal contact by over 80%
- Yet; Some feel that the travel is waste of time (46%), but the majority seem to enjoy the variation caused by travells
- Business travells are (no longer) perceived as prestigious

Chart data (% Agree):

Statement	% Agree
Business travells is seen as prestigious	14.1
In our business there is an expectations that we should meet face-to-face	47.8
Business travells shoul to a larger extent be replaced with videoconferences	46
Where I work we try to reduce the travel activities as much as possible	56.8
It is important to meet customers, colleagues and co-workers face-toface	92.1
I use my travels time to for working	58.9
I often combine business travells with other trips	21
I think I have too many business travells	25.7
Informal contact with my collaborators is as important as formal	84.3
I think that travell time is wasted	46.8
Business travells gives positive variations in my work	73.2

% Agree

Four main orientations to videoconferences and travelling

- **"Techno enthusiasts":**
    - VC can reduces travel strain;
    - VC saves time;
    - VC improves information flow;
    - <u>VC should be used more to reduce travels</u>

- **"Networker builders":**
    - VC makes it difficult to develop contacts;
    - VC is a bad substitution for personal contacts.
    - VC Don't fit my work tasks

- **"Tired travellers":**
    - I have too many travels;
    - Travel is waste of time;
    - <u>VC should be used more to reduce travels</u>

- **"Negotiators":**
    - It is important to meet customer, partners and colleagues FTF;
    - Informal contact is as important as the formal;
    - There are expectations of meeting FTF in our business

Scree Plot

(Eigenvalue vs Component Number scree plot with first four components circled in red)

"Tired travellers" are most eager *users* of VCs

- The "network builder" attitude is negatively related to frequencies of videoconferences
  - A high need for networking seems to reduce the use of VC
  - This is a common attitude among employees & managers in small enterprises
- The "tired travellers" have participated in most videoconferences last year
  - A negative attitude to travelling might initiate the use of VC
  - These are overrepresented in larger enterprises and among people who already travel a lot
- The "techno supporter" attitude is positively related to number of videoconferences last year
  - Yet, to a lesser degree than the tired travellers
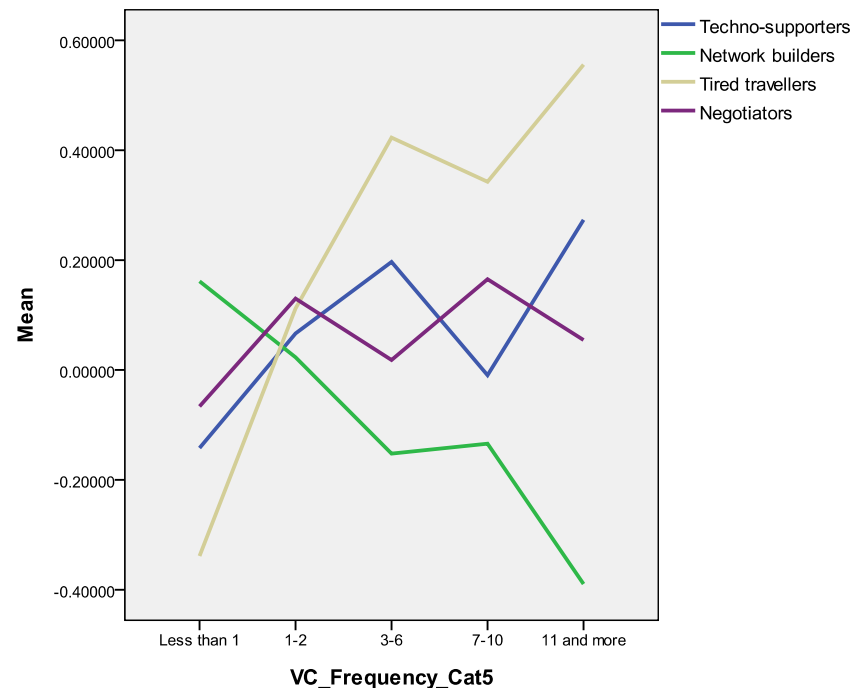
How will videoconferencing affect on the demand for business travels?

- VC will be used to take shares of the aviation market related to particular situations
    - In situations of economic downturn
        - Example: Norway 1998-2003 : VC may have substituted for 2.5-3.5 % of all domestic business air-travels
    - As "backup" in cases of emergency
        - Environmental disasters, Terror attacks, political crisis, etc
        - Example: the volcano ash crisis in April: 3-7% replaced travel-related FTF meeting with VC
    - Related to travel tiredness
        - As the number of longer business travels increase this will be more important

The Norwegian Prime minister participates in a videoconference, in New York during the volcano eruption

- Still, the potential for long term substitution of aviation traffic is moderate
    - The need to build relations, sustain trust, and the symbolic values connected to FTF- meetings are driving the need for business travels
    - Development towards globalisation and knowledge intensive economies are likely to strengthen the need for both videoconferences *and* business travells
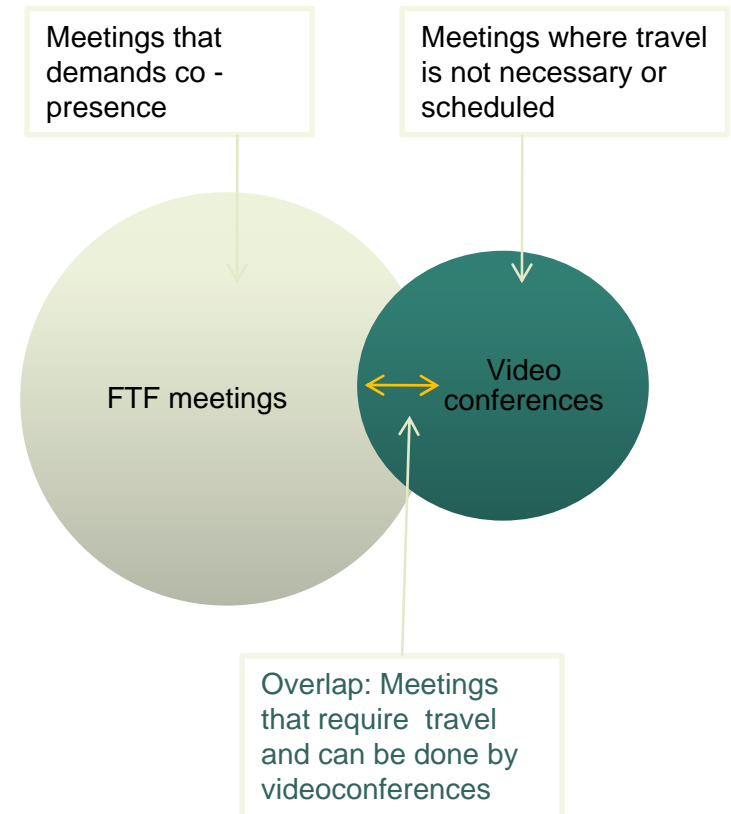
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"Trust needs touch […] Paradoxically, the more virtual
    an organization becomes, the more its people
    need to meet in person"

Charles Handy (1995)

Conclusions

Meetings with distributed partners

- Videoconferences have got a strong and persistent foothold among business travellers
  - Conference rooms still dominates., i.p. among those working in larger organizations
  - Smaller enterprises rely more on desktop conferences, mobile conferences and VOIP (Skype).
- Videoconferences and FTF-meetings have complementary functions
  - VC is mainly used as an additional solution to FTF meetings, where relations already has been established.
  - FTF meetings are necessary to build new connections, develop trust and express confidence across geographical and cultural boundaries
- Yet, there is an "overlap" where videoconferences can substitute for FTF meetings.
  - In cases of emergencies, need for cutting costs or to avoid travel tiredness, the share of VC can be extended.
  - Efficient and convenient transportation , as well as attractions related to travel, may also reduce this space

Meetings that demands co - presence

Meetings where travel is not necessary or scheduled

FTF meetings

Video conferences

Overlap: Meetings that require travel and can be done by videoconferences

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