# The use of ICTs as an alternative to business travel: the scenario in South Africa

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#### Abstract

There is an ongoing debate on the use of technology as an alternative to business travel with views expressed by both industry and academia. From this discussion it appears that industry surveys take a more positive view while academic studies indicate a more cautious approach to the level of growth of technology as an alternative to business travel. The main purpose of this study is to identify those factors that play a role in the extent to which ICTs are used as an alternative to business travel. The study follows two phases. Phase 1, which is covered in this paper, presents a theoretical framework of those factors that influence the use of travel alternatives and culminates in the formulation of a conceptual model and proposed questionnaire. Phase 2, which will constitute a follow-up paper, will cover the empirical research aimed at testing the factors as identified in the theoretical overview.

**Keywords:** Business travel; corporate travel management; travel alternatives; teleconferencing; web conferencing; videoconferencing.

## 1 Introduction

Business travel is only one tool for managing relationships with important constituencies within and outside an organisation. Other tools, such as telephone contact and teleconferencing, overnight delivery of letters and documents, electronic mail and videoconferencing, combined with physical travel could also be utilised to keep business relationships active and productive (Lehman & Niles, 2001). Research from both industry and academia suggests that there is increasing use of technology as an alternative to business travel (American Express, 2003; Anon, 2006; Robart, 2006; Wainhouse, 2004) but at the same time that constraints exist because technology is not yet optimal as a substitution for face-to-face meetings or could be too costly to implement. Denstadli (2004) and Mason (2002) found that technologies such as videoconferencing had not had a significant influence on the number of business trips undertaken although Mason (2002) predicted that technologies would have advanced sufficiently to permit for some substitution in the future. The purpose of this study is to identify those factors or determinants that play a role in corporate decisions on substituting travel with technology alternatives such as videoconferencing, teleconferencing and web conferencing. A two-phased approach is followed. Phase 1, which constitutes the content of this paper, provides the theoretical base for the identification and testing of the determinants of substituting technology for travel. This is done through a study of secondary information, both from academic literature as well as industry sources (from which most research has been driven). The result of this phase is the formulation of a conceptual model for business travel alternatives (figure 1) from which a structured questionnaire is designed, the items of which are reflected in table 1. The application of the questionnaire will be done in phase 2 which is the empirical study wherein corporate travel managers are surveyed. The results of this phase will be presented in a follow-up paper. The ensuing discussion covers a short section on types of travel alternatives. Thereafter, the factors as identified through the secondary sources are discussed.

# 2 The types of travel alternatives available

Videoconferencing, teleconferencing and web conferencing appear to be the most viable alternatives to travel (Wainhouse Research, 2004). Videoconferencing can be summarized as an interactive application of video, computing and communication technologies to permit people - either one-on-one or in groups of up to 12 people - in two or more localities to convene without actually being together (Enbysk, n.d.). According to Enbysk (n.d.) teleconferences are the ideal communication tool for sharing straightforward information and making simple decisions that need no visual presentation. But they are not the appropriate way to discuss more complex matters, which could be presented more appropriately via web conferencing. Teleconferencing is also not a desirable way to start or even advance a vital business relationship. Another tool that is becoming increasingly important as an alternative to business travel is web conferencing, which grew by 40% in 2003 (The Economist, 2004). According to Enbysk (n.d) web conferencing can be explained as videoconferencing without the video - or alternatively - teleconferencing but adding the web for interactive presentations by using Powerpoint, Excel or other documents. Still, web conferencing cannot compete with face-to-face meetings since, unlike videoconferencing, the audience's facial expressions and body language cannot be observed. But, for simple business plan reviews, sales meetings and software demonstrations it remains a viable alternative to travel (Enbysk, n.d).

# **3** Factors influencing the use of travel alternatives

#### 3.1 Travel alternative benefits

A number of studies agree that the most important reason for the increase in the use of audio/video conferencing tools is that it is a way to reduce travel expenses (CBOC & ACTE, 2007; The Economist, 2004) which come in the form of hard cost savings such as flights, hotels, car services and food as well as soft cost savings for example the cost of saved employee time (Meyer, 2009). The time saving factor appeals to many business travellers since technology could be utilised as an alternative to gain lost travel time while enhancing productivity and business performance as well as the quality of business level decision-making (Business News Update, 2006; EyeforTravel, 2002). Other research showed that converting in-person meetings to travel alternatives would permit business travellers to travel less, spend more time with family and friends and cultivate better relationships with co-workers, customers

and partners (Wainhouse Research, 2004). Meyer (2009) asserts that one of the most essential benefits of videoconferencing is its ability to enhance employees' quality of life. He mentions a study where telecommuters reported higher job satisfaction and loyalty to their employers as well as less stress and improved work-family balance. Another advantage of using travel alternatives instead of face to face meetings is that it allows the attendees of a meeting to archive sessions and view them again later on. Organisations' concerns about saving costs may be encouraging them to implement green alternatives to business travel. Web conferencing has been gaining popularity over the past year, and is named as one of the main sustainable business strategies (Sustainable Life Media, 2009). Videoconferencing can help lessen an organisation's carbon footprint, while at the same time improving its corporate social responsibility (Meyer, 2009).

#### 3.2 Travel alternative disadvantages

According to Quest (in Mill & Morrison, 2006) in the UK, corporate travellers are travelling less because of technology – particularly through the use of remote access and virtual private networking (VPN) but not many travellers believe that such technology is more valuable than face-to-face meetings. Since those services are usually bought on a per-minute or simultaneous user basis, access and usage is often limited to less than 20 per cent of employees in an organisation to prevent escalating subscription costs (Business News Update, 2006). According to Kim Moore, founder and CEO of Executive Systems of Colorado Springs in the United States meeting via technology is not yet ready to substitute face-to-face meetings. The practical problems linked with video conferencing have restricted its use since it has never been completely stable. Chris Bakker (2009), corporate travel manager of Barloworld Logistics said that face-to-face communication was very important in their organisation and highlighted the fact that travel alternatives allow for no human contact as a disadvantage. He also raised the issue that travel alternatives are costly and had concerns about the security of these alternatives. Linda Basson (2009), Director of Facilities and Services at Accenture was of the opinion that travel alternatives do not allow for relationship building and the establishment of contacts. She also mentioned that with travel alternatives there is no opportunity for knowledge and best practice sharing.

## 3.3 Barriers to implementation

Apart from the disadvantages of travel alternatives, certain barriers prevent organisations from implementing these technologies in their organisations. Linda Basson (2009) pointed out that *telecommunication costs in South Africa are high* and that this might prevent implementation of travel alternatives. She also felt that there might *not be enough knowledge* within an organisation to permit implementation of travel alternatives. Chris Bakker (2009) also highlighted the cost issue and mentioned that there might be *no need for travel alternatives within certain companies*. He furthermore explained that some organisations might be in a "comfort zone" and as such *resist change* that accompany the implementation of alternatives.

#### 3.4 Types of business interaction

The communications tools mentioned above go hand in hand with travel, and serve as introductions, follow-ups and, in some cases, replacements for travel. Because of the unique strengths of face-to-face interaction, physical travel is expected to remain the most vital tool for maintaining relationships. According to Enbysk (n.d.) under the following circumstances, travel is necessary as face to face meetings are warranted: when meeting a new client, when introducing new people to a continuing business relationship, when concluding a sale or signing a contract, when delivering a product demonstration, when resolving a problem, or discussing confidential information, when convening with a lawyer, when asking for money from an investor and lastly when making sales or training presentations. However there are situations where electronic travel alternatives can actually be more effective, for example as a second meeting tool after the first introductory meeting (The Economist, 2004). The challenge is to be able to identify these situations and assign resources accordingly (Lehman & Niles, 2001:1). Chris Bakker, Linda Basson and Niall Johnson (2009) from Ernest & Young all regarded the following types of business interaction to be suited to travel alternatives: internal meetings, urgent meetings, status meetings, client interaction, attending a conference as well as collecting information before approaching a client. Negotiations, disciplinary and performance hearings and sharing of confidential information were regarded as types of interaction not suited to travel alternatives.

#### 3.5 Organisational profile

It is believed that the *size of an organization* (in terms of the number of offices as well as the number of employees) will have an influence on whether an organisation will adopt travel alternatives or not. Bakker (2009) believes that the more employees there are in an organization that can make use of travel alternatives the more cost effective these technologies will be. Furthermore, the *location of the organisation's offices* will also have an impact on their adoption of travel alternatives. Basson (2009) believes that a large global company is more prone to adopt alternatives than a small local company. Johnson (2009) agrees and added that where *global decisions* need to be made in an organisation, travel alternatives could be useful. *Service oriented organisations* are also more suited to implement travel alternatives (Johnson, 2009).

## 4 The conceptual model for business travel alternatives

From the above theoretical discussion it is evident that there are certain factors that influence the usage of travel alternatives and these are presented as a conceptual model in figure 1. Figure 1 proposes that the usage of travel alternatives will be determined by the advantages of using technology, the disadvantages, barriers, types of business interaction and organisational profile. These determinants serve as the framework for the development of the questionnaire which will be distributed to corporate travel mangers in South Africa. The items to be measured in the questionnaire as identified through the literature study, are presented in table 1.

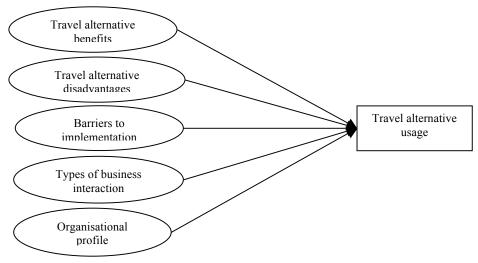


Fig. 1. Determinants of business travel alternatives usage

**Table 1.** Items to be measure in the questionnaire

FACTOR	VARIABLE
BENEFITS	Reducing travel expenditure;more efficient use of working hours; allowing an employee more free time; improving productivity; reducing carbon footprint; faster and better decisions; and avoiding travel safety-related hazards
DISADVANTAGES	Too expensive, no human contact; cannot pick up on body language; compromising security of information; difficult to build relationships; a perception of a client being less important
BARRIERS	Telecommunication costs are too high; not enough knowledge to implement; capital layout too expensive; no need for it; organisations might resist change; incompatible equipment; practical problems with equipment
TYPES OF INTERACTION	Internal interaction such as status, internal and urgent meetings, disciplinary hearings and sharing of confidential information  New interaction such as collecting information before approaching a client; establishing first contact and negotiating new contracts  Established interaction: Sales calls  Other interaction: Attending a conference
ORGANISATIONAL PROFILE	Number of branches and employees; type of industry and organisation; position in company; ownership; travel expenditure; corporate culture

# 5 Conclusion

Once the data collection phase is complete and depending on the number of responses, tests such as the Cronbach Alpha, and Chi Square tests for significance will be done and consideration will be given to further tests to determine the validity of the model. The results and conclusions will be written up for possible publication in a

further paper so that studies can be replicated in other geographical contexts. If the framework proves to be valid, the constructs could be used by organisations to predict whether implementing travel alternatives would be a feasible decision under certain circumstances. This research study will, to some extent overcome the lack of scientific research in the area of business and corporate travel management and particularly the use of ICTs as an alternative to business travel.

## References

- American Express. (2003). American Express Survey Of International Business Travelers. Available from: http://www.AmericanExpress.com. [Accessed: 2004-03-25].
- Anon. (2006). Face-to-face meetings still beat Web teleconferencing. The Kansas City, 16 March.
- Bakker, C. 2009. Verbal communication with the author on 3 August. Johannesburg. (Transcript / notes in possession of author.)
- Basson, L. 2009. Verbal communication with the author on 3 August. Pretoria. (Transcript / notes in possession of author.)
- Business News Update. (2006). Is your journey really necessary? *Business News Update*, June/July:6.
- CBOC and ACTE. (2007). Canadian Business Travel Outlook 2008. The Conference Board of Canada and the Association of Corporate Travel Executives Report.
- Denstadli, J.M. (2004). Impacts of videoconferencing on business travel: the Norwegian experience. *Journal of Air Transport Management*, 10(6): 371-376.
- Enbysk, M. (N.d). *Virtual meetings cut travel costs*. [Online] Available from <a href="http://www.microsoft.com/smallbusiness/resources/finance/business-travel/virtual-meetings-cut-travel-costs.aspx#Virtualmeetingscuttravelcosts">http://www.microsoft.com/smallbusiness/resources/finance/business-travel/virtual-meetings-cut-travel-costs.aspx#Virtualmeetingscuttravelcosts</a>. [Accessed: 2009-06-20].
- EyeforTravel. (2002). Wainhouse Research Survey of Business Travellers tracks use of Collaboration Technologies. [Online] Available from: http://eyefortravel.com. [Accessed: 2002-09-06].
- Johnson, N. 2009. Verbal communication with the author on 3 August. Johannesburg. (Transcript / notes in possession of author.)
- Lehman, T & Niles, J. (2001). A Future Role for Travel Management. *Business Travel Executive magazine*, January.
- Mason, K. (2002). Future trends in business travel decision-making. *Journal of Air Transportation*, 7(1): 47-68.
- Meyer, T. (2009). Videoconferencing: Ideal medium for effective communications between geographically dispersed teams. *The Star*, 29 May: 9.
- Mill, R.C.& Morrisson, A.M. (2006). *The tourism system*. 5th ed. Dubuque, Iowa: Kenda/Hunt Publications.
- Robart, M. (2008). Wainhouse Research: Videoconferencing Market to See Record Growth.

  [Online] Available from: <a href="http://www.tmcnet.com/channels/hd-videoconferencing/articles/34798-wainhouse-research-videoconferencing-market-see-record-growth.htm">http://www.tmcnet.com/channels/hd-videoconferencing-market-see-record-growth.htm</a>. [Accessed: 2009-05-24].
- Sustainable Life Media. (2009). Are Cost-Conscious Companies Ditching Green Business Travel. [Online] Available from:
  - http://www.sustainablelifemedia.com/content/story/strategy/are\_companies\_ditching\_gren\_business\_travel [Accessed: 2009-06-16].
- The Economist. (2004). Business: Being there; Virtual meetings. *The Economist*, 15 May: 73
- Wainhouse Research. (2004). Survey Results: Usage Trends of Collaboration Technology by Business Travelers 2004. [Online] Available from: <a href="http://www.ivci.com/pdf/conferencingAndBusinessTravelSurvey2004.pdf">http://www.ivci.com/pdf/conferencingAndBusinessTravelSurvey2004.pdf</a>. [Downloaded: 2009-06-15].