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### Exploring the telecommuting paradox

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## Exploring the Telecommuting Paradox

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Telecommuting is a term often used to describe the use of Information Technology to partially or wholly replace work-related travel. Telecommuters work from their own preferred location, usually home or a satellite center, instead of the corporate office. Recent surveys put the number of US-based telecommuters at 11 million, most of whom telecommute part time. Although some 62% of companies are reported [1] as encouraging telecommuting, 42% having programs underway, a mere 7% of employees actually telecommute. This has given rise to what Westfall [3] characterises as the 'Telecommuting Paradox'.

Hundreds of reports and studies have been published in recent years concerning the impacts of telecommuting. The potential benefits are manifold and make it appealing both to employers and employees. Organizations can expect to see reduced overhead costs in maintaining a central work facility, improved work productivity, greater staffing flexibility, and better employee retention. Telecommuters in turn can expect a higher quality of life, more flexible work schedule and reduced transportation cost and duration. Possible drawbacks include: the cost of implementing telecommuting programs; the difficulty management may experience in supervising employees; and the negative effects that telecommuting may exert on career development for employees.

A significant weakness of most previous studies is that they only attempt to identify the *potential* benefits of telecommuting, as perceived by employees who currently do not telecommute or of employers who hypothetically consider the benefits to the organization of telecommuting. In this essay, we describe briefly how we elicited the beliefs of current telecommuters towards telecommuting and then identify the key drivers of telecommuting (i.e. what primarily determines employees' intention to

telecommute). This is followed by a discussion of the implications of these drivers for organizations that wish to consider how they can implement a telecommuting program successfully.

In order to elicit the factors affecting the adoption and the level of telecommuting, we conducted semi-structured interviews with twenty eight current North American telecommuters. These interviews were based on Triandis' [2] model of human behavior which helps us to explain a telecommuter's intention of his/her future level of telecommuting. The model incorporates four domains of contributory factors, viz.: one's attitudes towards the behavior, the perceived consequences of performing the behavior, relevant social factors, and facilitating conditions.

Four perceived consequences were identified as being particularly influential. Interviewees perceived that their economic benefits would increase, that their quality of life at home, work and socially would improve and that they would become more productive in their work. However, they were concerned that their career development might be negatively impacted. On the social side, the influence of one's family, peers, superiors and subordinates were all seen as relevant to the decision to telecommute. Influence here suggests that a particular group of people either thinks one should telecommute, or overtly encourages one to do so. Where facilitating conditions are concerned, four relevant factors were identified, viz.: the suitability of work space at the telecommuting site (whether home or a satellite site); one's self-efficacy at work (including comfort when working in a telecommuting environment and confidence in working without assistance); access to the appropriate technology; and the availability of technical and logistic support.

Following this elicitation of telecommuters' beliefs about the various factors relevant to their own telecommuting, we conducted a follow-up survey to determine the significance of the elicited factors in explaining the telecommuters' intention of future telecommuting. The survey instrument was sent to 650 current North American telecommuters, 101 (15.5%) responding. The beliefs of the survey respondents regarding the telecommuting factors are presented in Table 1. Respondents were asked to agree, disagree or indicate their indifference to the different factors that are expected to affect their intention to telecommute in the future.

**Table 1: Telecommuters Beliefs**

	<b>Agree</b>	<b>Indifferent</b>	<b>Disagree</b>
<b>Perceived Consequences</b>	<b>%</b>	<b>%</b>	<b>%</b>
Economic Benefits	82.6	13.1	4.3
Productivity	91.3	6.5	2.2
Quality of Work Life	85.9	4.3	9.8
Quality of Family Life	79.1	14.3	6.6
Quality of Social Life	57.1	28.6	14.3
Career Development	50.5	27.5	22.0
<b>Social Factors</b>			
Superior Influence	57.6	31.5	10.9
Family Influence	71.1	22.2	6.7
Peer Influence	58.7	38.0	3.3
Subordinate Influence	7.8	38.9	53.3
<b>Facilitating Conditions</b>			
Access to Technology	89.2	8.6	2.2
Appropriate Work Space	91.3	1.1	7.6
Availability of Support	81.3	4.4	14.3
Self-Efficacy at Work	92.5	3.2	4.3

According to Triandis' [2] model, intentions are also determined by attitudes towards the behavior. The attitudes are in turn influenced by the perceived consequences of the behavior. Consistent with the reported positive beliefs regarding the perceived consequences of telecommuting, the respondents were mostly very favorable to this work arrangement. Over 85% of the respondents perceived telecommuting to be wise and over 90% perceived it to be both good and pleasant. Only 3% felt discomfort with telecommuting, indicating that they intended to reduce it in future. By contrast, 32% indicated that they would telecommute more in future, with the other 65% comfortable with their existing levels of telecommuting.

Perceived consequences, social factors and facilitating conditions were all found to be significant in explaining the respondents' intentions regarding the level of future telecommuting. Figure 1 presents the significance of the domains and their constituent factors. The significance was assessed using structural equation modeling techniques. It is followed by a discussion of the paradox with respect to the telecommuting drivers.

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Insert Figure One About Here  
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Where *perceived consequences* are concerned, the key driver is productivity. According to Westfall [3] employees are motivated more by self-interest than by altruism or commitment to organizational goals. They are also more concerned about risks to themselves than their managers are. Telecommuters must have access to appropriate productivity tools, as well as good time and project management techniques and coordination that enable them to work remotely, yet keep in touch with their colleagues. Failure to provide these tools in the working environment will act as a disincentive to telecommute, since otherwise the gains from eliminating unproductive time will be offset and improvements will not be evident.

The principle social driver of telecommuting is peer influence, reflecting organizational culture. It is critical that the organizational culture not simply accept the value or importance of telecommuting, but actively and enthusiastically promote it. We noted that peer influence was seen, perhaps surprisingly, to outweigh the influence of superiors. We explain this by considering that even if superiors do encourage telecommuting, the organizational culture and hence the reward system must also support it as a desirable behavior. Clearly, however, where the organizational culture is favorable, the additional influence of superiors, combined with their own practice of this behavior, will provide additional incentives to telecommute.

Self-efficacy has been found to be the most powerful influence on the intention to telecommute. Self-efficacy implies that telecommuters can function without relying on assistance on how to use the technology or how to perform their tasks effectively. This finding reflects the importance of job suitability and the need for formal training: telecommuters should know how to make best use of their time and have the ability, willingness and motivation to work remotely from other people and from technical

support facilities. Telecommuting programs should therefore focus on those people and tasks that are suitable and train telecommuters and their managers accordingly.

In order to clarify why telecommuting has failed to penetrate organizational life, organizations need both to understand telecommuting drivers and identify what they see as their goals in implementing a telecommuting program. The factors that we have identified as drivers for telecommuting can be used by organizations with focus groups of potential telecommuters so as to learn more about how telecommuting could be implemented. In particular, potential telecommuters need to consider their own expectations, for example of their self-efficacy and productivity, in order to understand how telecommuting can work for them. They might consider what productivity tools are most suitable for their work, or what a training program should look like for it to be both effective and relevant to their work. Finally, at the organizational level, there may need to be a culture change – a change to a new paradigm of work arrangements and reward schemes that will encourage more people to telecommute.

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**Figure 1 – Telecommuting Factors: Significance & Relative Importance**

